

Observations on language spread in multi-lingual societies: Lessons learnt from a study of Ancient and Modern India

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Abstract

The objective of this paper is to formalize and document observations on language spread in multi-lingual or polyglot societies as understood from a study of spoken and written language in various phases in Indian history starting from the Indus Valley Civilization of Ancient India, the mature phase of which began in 2600 BC, to modern Post-independent India, and formalize them into principles wherever possible, so that these can be used as a basis to make further observations and draw further inferences from studies both in India and elsewhere, the ultimate goal being to prepare a dictionary of the universal principles of language spread in multi-lingual or polyglot societies, and the general principles of language spread for ready use anywhere in the world. Such an exercise can be carried out by collating the basic observations and principles as understood from this paper with observations culled from similar studies that have already been carried or may be carried out both in India and elsewhere in the world. Such a compendium would be a valuable heuristic tool for analysis and can be an indispensable tool for use by politicians, educationalists and others across the world for decision-making and policy-formulation, and as a part of the emerging discipline of Applied Linguistics. It will also be useful to the common man to help him understand the various seemingly mysterious forces that greatly impact his daily life. We also introduce several new concepts in this paper, such as the Theory of Win-Win Propositions, the Doctrine of Insubordination, the Theory of Linguistic Osmosis, Context and Role-based suitability, Context and Role-based indispensability, Yoyo model of cultural diffusion etc. Thus, this paper delineates much of the theoretical framework that can be used for a formal study of the spread of languages in any multi-lingual society.

Introduction

The key objective of this paper is to understand the dynamics of language spread in multi-lingual and polyglot societies such as India and formalize and document observations on language spread and formalize them into principles wherever possible. This is based on a study of spoken and written language in various phases in Indian history starting from the Indus Valley Civilization of Ancient India, also popularly known as the IVC, the mature phase of which began in about 2600 BC, followed by a study of Post-Harappan India or the cultures of the Gangetic plains, then post-Buddhist India, Mughal India, South India, the British era and finally modern Post-independent India so that commonalities and patterns observed across the aforesaid periods can be used as a basis to make further observations and draw further inferences from other similar studies that have already been carried out or that may be carried out both in India and elsewhere, the ultimate goal being to prepare a comprehensive dictionary of the universal principles of language spread for ready use anywhere in the world. Such an exercise can be carried out by collating the basic principles as understood through this paper with observations culled from similar studies that have been carried out or that may be carried out elsewhere in the world. Such a compendium would be a valuable heuristic tool for analysis and can be an invaluable tool for use by politicians, educationalists, linguists, sociolinguists, linguistic anthropologists, arm-chair academicians and others across the world for decision-making and policy-formulation, and would not only avoid erroneous decision-making but would also greatly help in formulating language policies that are in the greater interests of larger section of society. It will also be useful to the common man to help him understand various seemingly incomprehensible forces that greatly impact his daily life. This can also help in carrying out a root-cause analysis for failed language policies and can also help in predictive analysis. We also introduce several new concepts in this paper, such as the Theory of Win-Win Propositions, the Doctrine of Insubordination, the Theory of Linguistic Osmosis, Context and Role-based suitability, Context and Role-based indispensability, Yoyo model of cultural diffusion etc. This paper puts to use DPPF or Dialogues between the Past, the Present and the Future techniques that we proposed in a previous paper. ¹

Although, this paper delineates much of the theoretical framework for the formal study of the spread of languages in a multi-lingual society and presents cases studies from across the globe in support of principles enunciated in this paper, it does not purport to be a comprehensive dictionary of the principles of language spread in multi-lingual societies at this point. Rather, it is to be seen as a starting point, which will allow other scholars to relate to their own contexts, bring in their points of view or synthesize with incremental data. Let us now begin our study of various phases of Indian History beginning with the Indus Valley Civilization which began in about 3300 BC and lasted till around 1400 BC but flourished between 2600 BC and 1900 BC in a very large area in North-Western India.

The linguistic scenario in Harappan India

The Indus Valley Civilization or the IVC was one of the great civilizations of the ancient world and began somewhat later than the Mesopotamian and the Egyptian civilizations. It was four times larger than the other two, and in some respects more advanced than them. In a paper dealing with the Aryan

¹ Historiography by Objectives: A new tool for the study of history within the framework of the proposed Twenty-First Century School of Historiography Sujay Rao Mandavilli ELK Journal of Social Sciences March 2015

problem which was published in two parts by the ICFAI University press,^{2 3} we had proposed that the Indus Valley Civilization was intensely multi-lingual and spoke many languages belonging to many language groups, and collectively referred to these languages as Indo-Semitic. These had perhaps split up from or were very remotely related to the languages of the Mesopotamian region long before the mature period of the Indus Valley Civilization (There are well-defined isoglosses to the west of the Indus valley, and the Indus valley was believed to have been only gradually settled in from Baluchistan where the Neolithic site of Mehrgarh has been found) and were perhaps remote ancestors of languages which some two thousand years later, came to be known as the Prakrits of the Gangetic plains, after the transfer of populations to the Ganga-Yamuna doab in 1900 BC. The term Meluhha is believed to be a toponym for the Indus Valley civilization and was used further west in Sumeria (this identification is accepted by scholars such as Gregory L. Possehl, Asko Parpola and Iravatham Mahadevan) and may have been used in a linguistic sense as well. This is believed to have be the source of the Sanskrit word 'mleccha' meaning alien or barbarian, which was later loosely used in Sanskrit literature in a linguistic context as well, and 'Mleccha Prakrits' (which itself was perhaps a much later term) were referred to as apasabdas or constituents of the outermost layer of languages in liturgical tradition. Given the urban nature of the civilization and the relatively large cities for the period, it is likely that most cities were multi-ethnic and multi-lingual. These languages later synthesized and de-synthesized with the PIE, or one of the constituents of the PIE (the PIE refers to Proto Indo-European or the hypothetical ancestor of Indo-Aryan and the European languages), to form two separate language groups, the first being Vedic Sanskrit and the other being the various Prakrits as was explained in great detail in our paper. A high degree of cultural and racial diversity has also been suggested from a study of skeletal remains of various cities in the IVC. It was therefore, likely, that most inhabitants of these cities, or at least elites were proficient in more than one language. This is also implied by the fact that there appear to have been trade and cultural contacts between the cities and the regions of the Indus, fostering a remarkable degree of cultural overlap across the multiple cultures of the IVC. This was in addition to the fact that the Indus had trade and cultural contacts with Mesopotamia as evidenced by the large number of Indus seals and artefacts found in that region. Despite its large size and its remarkable homogeneity within its diversity, it is highly unlikely that there was any spoken or written lingua franca in the Indus valley. There were perhaps many reasons for this. Firstly, this was perhaps in large part, due to the fact that no language would have been equipped to play such a role, given its mind-boggling linguistic diversity. Secondly, there appears to have been no over-arching political authority in the Indus, leading to any unwarranted interference in the dynamics of language spread. This would have allowed the native languages of any given part of the IVC to flourish without undue political interference. Thirdly, it appears that the Indus script was a logo-syllabic script designed to take into account the peculiarities of the Indus, with a large number of non-linguistic signs which would have allowed non-linguistic communication between culturally diverse groups between the peoples of the Indus and beyond (This was perhaps its most important use), and those speaking more than one language. The Indus script appears to have been put to use to foster trade relations with Mesopotamia as well, and could perhaps be read by small groups of people who were outside the linguistic ambit of the Indus. One take other hand, it appears, if one considers the evidence of the large Dholavira signboard, that the Indus script was also designed

² Syncretism and Acculturation in Ancient India: A new Nine Phase Acculturation Model explaining the process of transfer of power from the Harappans to the Indo-Aryans Part One Sujay Rao Mandavilli ICFAI Journal of History and Culture 2009

³ Syncretism and Acculturation in Ancient India: A new Nine Phase Acculturation Model explaining the process of transfer of power from the Harappans to the Indo-Aryans Part Two Sujay Rao Mandavilli ICFAI Journal of History and Culture 2010

with larger texts in mind. In such a case, administrative texts may have been maintained by the local authorities in the local language, obviating the need for a written lingua franca. This has been discussed in very great detail in our papers dealing with the Indus script. Fourthly, it was also likely that the elites of the Indus were proficient in more than one language, and this factor itself may have been used to foster some kind of a communal harmony.^{4 5}

However, Sanskrit appears to have become some kind of a lingua franca towards the end of the mature Harappan phase, at least in major cities and urban areas, and from 1900 BC onwards. This was in large part, due to the fact that it may have been able to fill in a long-felt need or a void, and also due to the fact that Aryan culture (we emphasize the word culture) spread from the Gangetic plains to Afghanistan in a very short span of time immediately after the end of the Mature Harappan phase, or towards the end of the Indus Valley Civilization. This rapid spread of Sanskrit happened despite the lack of an over-riding political authority on Post-Harappan times.

We have showed at a very great level of detail, how this may have happened in our paper on the 'Aryan' problem. Readers who want a more detailed explanation, may refer the aforesaid papers. Likewise, Sheldon I. Pollock says in his book "The language of the Gods in the World of Men"⁶

"Once Sanskrit emerged from the sacerdotal environment to which it was originally confined, it spread with breath-taking rapidity across Southern Asia. Within three centuries, Sanskrit became the sole medium by which ruling elites expressed their power from as far West as Purushapura in Gandhara to Panduranga in Champa in Central Vietnam. Sanskrit probably never functioned as an everyday means of communication, not in South Asia itself, nor was it ever used excepting among the elites as a bridge – or link – or trade language. There is little evidence to show that it was ever used as the language of rule. Tasks such as communication or revenue accounting appear to have been accomplished by informal use of the local language. The work Sanskrit did was beyond the quotidian and the instrumental. It was directed above all towards articulating a form of political consciousness and culture."

Thus, when such a lingua franca became available, it began to be put to appropriate use, and spread fairly rapidly over a large region within a span of one or two centuries, filling in a long-felt need or void.

The linguistic scenario in Post-Harappan India

In our paper, we had explained how Sanskrit gradually became the language of the elites in Post-Harappan India. It did however, not do so in a linguistic vacuum. Descendants of the languages of the Harappans became the languages of the people in the Gangetic plains (these later came to be known as Prakrits), along with the other languages which pre-existed in the Gangetic plains (examples of such languages being the Munda family of languages. The Munda group of languages consists of languages such as Sora, Gorum, Gta, Gutob, Remo, Kharia, Juang, Asuro, Korwa and Kurku, They are the least-

⁴ Reconfirmation and Reinforcement of the Indus Script Thesis: A Logical Assessment and Inquiry as to the Elusive and Enigmatic Nature of This Script Sujay Rao Mandavilli The IUP Journal of History and Culture 2011

⁵ Why the Indus Script WAS true writing and why a larger corpus of texts existed in the Indus Valley civilization: Simple proof addressed to mainstream researchers & archaeologists Sujay Rao Mandavilli Published in the International Journal of Philosophy and Social Sciences (IJPSS), Vol II, No 2, 2012

⁶ The languages of the Gods in the world of men: Sanskrit, Culture, and Power in Premodern India Sheldon I Pollock ISBN: 9780520260030 June 2009

known and most poorly documented languages of the Indian subcontinent, and the history of the evolution of these languages in notoriously unreliable despite the fact that some work has been done by Norman Zide, Heinz Jurgen Pinnow, Peter W Schmidt, Michael C. Shapiro, Harold F. Schiffman, Jeremy H. C. S. Davidson and many others). Scholars such as Franklin C. Southworth, M.B Emeneau and Alfred C. Woolner also seem to imply that the Prakrits, or some ancestors of Prakrits, existed as a parallel body of languages in Rig Vedic times. The usage of Sanskrit appears to have been chiefly liturgical. Sanskrit was never the language of the masses or a large section of the population in Ancient India. From our papers, and the principles of language spread enunciated in this paper, it would appear that a derivatives of Prakrits from Sanskrit would be well-nigh impossible and both were different streams of languages. An ancestor or Vedic Sanskrit which had already distanced itself from the PIE, or one of the constituents of the PIE, was however, perhaps spoken in the Vedic homeland in the mid-Himalayan region much earlier. The ruling classes may have abandoned Sanskrit as a native language fairly early in favour of the more widely-spoken languages of the Gangetic plains, and it is highly doubtful if the priests even spoke Sanskrit as a native language, except perhaps in rare or special occasions such as discourse or debate. However, Sanskrit became the most obvious choice as a lingua franca of the elite as no other language in the region could don this role, and given its ready availability, it began to be used over a wide region for the aforesaid purposes from Kasi or Benares to Purushapura in Gandhara in the North-West of India. It also soon began to be viewed as a cultural symbol in much of ancient India in Post-Harappan times. It is also unlikely that Sanskrit was even a written language in pre-Buddhist times, given the fact that literacy was limited in Post-Harappan times to small sections of society. Written records, if any, were perhaps in the Prakrits, and written records may have been limited in Post-Harappan India. However, Prakrits may not have broken out into literary languages until after emergence of Buddhism, which also saw the wider dissemination of other esoteric traditions, and Prakrits such as Ardhamagadhi were early literary Prakrits. We have discussed these issues in great detail in our paper dealing with literacy in Post-Harappan India, and in this paper we also showed how West Asian and Indian alphabetic scripts may have separated from each other between 1700 and 1600 BC after the development of the Proto-Sinaitic and the Proto-Canaanite scripts of West Asia but before Phoenician.⁷ This later evolved into the Brahmi of Ancient India and is the mother of all modern alphabetic scripts. Thus, it is obvious to us that the annihilation of languages spoken by a large number of people is unlikely under ordinary circumstances, even under political duress or power. On the other hand, Sanskrit appears to have been snuffed out as a spoken language fairly easily, given the fact that it was only spoken by a small number of people and was deluged by the Prakrits easily. Another learning from this period is the speed at which Sanskrit spread in Post-Harappan India, and this is perhaps similar to the spread of English in post-independent India. The only interesting and fundamental difference between the two of course being that there never appears to have been any political unity in early Post-Harappan times, or one that endured for significant lengths of time until the dawn of the Mauryan empire.

The linguistic scenario from 600 BC till the Mughal era

After the emergence of Buddhism, Prakrits which had been suppressed by Sanskrit, underwent a major revival as discussed in the previous section, as also did Pali, a language associated with Buddhism. Languages such as Pali and Paisaci are normally considered to be distinct from Prakrits despite the large number of cognates with Prakrits. Another key event during this period was the emergence of Classical Sanskrit, perhaps as a rival to the re-popularized Prakrits. Although Sanskrit had ceased to be a lingua franca by Mauryan times, either because it was expressly discouraged in this regard, or

⁷ Alphabetic scripts and other forms of literacy in Post-Harappan India: A logical assessment and inquiry as to the origin and extent of literacy in Post-Harappan India Sujay Rao Mandavilli IJPSS 2013

because it was seen as incompatible with popular symbols of Mauryan hegemony, or because Vedic religion itself began to be challenged at this time, or because the geographical vastness and the spatial spread of the Mauryan empire which at its zenith stretched from Persia or present-day Iran to the Cauvery delta in present-day Tamil Nadu precluded any one language from being adopted as the lingua franca. Sanskrit remained the liturgical language of the Brahminical elite, and was still viewed in many circles as a cultural symbol of Ancient India. Many new works were also compiled in Classical Sanskrit during this era such as the works of the Grammarian Panini. Prakrits took on many influences over the ages and eventually evolved into the Indo-Aryan languages of modern times. One later manifestation of the Prakrits was the Sauraseni group of languages or dialects. It is believed that this language group was widely spoken from the 3rd to the 10th centuries AD, and was also a literary language at this time. Some other scholars opine that Sauraseni as a group of spoken dialects dates as far back as 600 BC. If this is true, Magadhi, Maharashtri and Sauraseni Prakrits would be the three major groups of Prakrits extant around or after the time of the Buddha, and all of these played different roles in the evolution of different Indo-Aryan languages. The term Apabhramsa referred to a loose group of dialects spoken from the 10th to the 16th centuries AD, and literally means corrupt or ungrammatical language. Both Sauraseni and Apabhramsa had a fairly independent literature and were literary languages in their own right. The term Hindi or Hindavi may date to the 10th century AD, and Amir Khusrow, was perhaps an early Hindi poet. Dehlavi was also another name for this language. The terms Hindusthani and Urdu perhaps began to be used early in the Mughal era, and Persian words were also widely incorporated into various Indo-Aryan languages. Other Indo-Aryan languages also evolved from various Prakrits, and some modern Indo-Aryan languages like Marathi have literature dating to the 10th century AD. It is also clear that different varieties of Prakrits evolved into different Indo-Aryan languages. For example, Magadhi Prakrits were the ancestors of languages such as Assamese, Bengali and Odia, while Maharashtri Prakrits evolved into languages such as Marathi.

The linguistic scenario in early South India

Dravidian languages have probably existed in South India and parts of South-central India, notably the Chattisgarh region since time immemorial and certainly well-before the Buddhist era. Of these Tamil, Kannada, Telugu and Malayalam are the major languages, and also the major literary ones. Tamil, Malayalam, Kannada and Tulu are classified as Southern Dravidian languages, while Telugu is classified as a South-central Dravidian language. Naiki, Kolami, Ollari and Duruwa are the Central Dravidian languages while Kurukh and Malto are the Northern Dravidian languages. We have discussed the origin of Brahui, another 'interesting' Dravidian language found in Pakistan, in our previous papers, and have taken the views of many scholars in this regard. The major Dravidian languages were clearly influenced by both Prakrits and Sanskrit independently, as was explained in our earlier papers. Prakrits were brought to South India by Buddhist scholars and monks sometime after 500 BC, and its influences were more profound in the Eastern and the South-eastern parts of South India. Sanskrit spread to South India probably as a Brahminical reaction to Buddhism, and Brahminism soon began to flourish in parts of South India. The Brahmi script was also brought to South India after 500 BC probably by Buddhist scholars, and morphed into several variants such as Tamil-Brahmi and Bhattiprolu-Brahmi. Epigraphic evidence has greatly increased in the recent past, and newer finds of Brahmi have been made from present-day Tamil-Nadu, Sri Lanka and Andhra Pradesh. Some of these were discussed in our previous papers. All South Indian languages have therefore been highly influenced by the languages of the North, but Tamil much less than the other three major Dravidian languages. Tamil was also the first of the Dravidian languages to break out into a literary language, with inscriptions dating back to 200 BC. If latest epigraphic discoveries are taken into account, these may be well pushed back to 500 BC. We have discussed these findings at length in our paper on Post-Harappan literacy. However, it can be established beyond the shadow of a reasonable

doubt that an ancestor of the Tamil-Brahmi script was brought from the North, hence the nomenclature Tamil-Brahmi. The Tamil Classic Thirukkural, authored by the great poet Thiruvalluvar is dated to between 300 BC and 100 BC is one of the earliest extent literature in Tamil. Manimekalai and Silapattikaram are other great early Tamil classics dating to around the beginning of the Christian era or earlier. Manimekalai talks about Buddhism denoting cultural inputs from the North. In the ancient Tamil treatise on grammar, the Tholkappiyam dating to around 100 BC, word borrowings from the North are referred to as Vadacol, implying that they were brought from the North. Thus a Pan-Indian ideology clearly began to develop long before the dawn of the Christian era.

In the Shatavahana dynasty, which was centred on the Krishna-Godavari basin in present day Andhra Pradesh and flourished between 200 BC and 200 AD, and was nearly contemporaneous with the Sangam age of Tamilnadu, the linguistic scenario is much more interesting. Buddhism was well-entrenched here at the time, more so than even the Sangam-age kingdoms to the South. It is also likely if one takes current evidence into consideration that Telugu did not break out into a literary language until much later than Tamil, and unlike Tamil which flourished as a literary language some time before the Christian era, Telugu perhaps did not break out into a literary language until around 700 AD, even though there is a hint of older Telugu literature. In the Shatavahana dynasty in present-day Andhra Pradesh dating to between 200 BC and 200 AD, records were maintained in a form of Prakrit known as Maharashtri Prakrit which also appears to have been the official language of the dynasty given its Buddhist influence, and this language was clearly not native to the region. This language only interacted with the early Dravidian languages of the region, and did not replace them as in the case of Sri Lanka. Therefore, there is every reason to believe that either an early form of Telugu, or some ancestor of Telugu was native to the region as demonstrated by words resembling Telugu found in the substratum of the local records and the written tradition of the Shatavahana dynasty notably the Gaha Sattasai dating to between 200 BC and 200 AD, and also some early Bhattiprolu inscriptions dating to around 300 BC and this native language was perhaps not evolved enough to be used as a formal written language at the time. Thus, the situation is reversed here, one of the Prakrits being a liturgical language in the region as opposed to the general role of Prakrits in the north as languages of the masses.

By some accounts, Kannada may have an older literary tradition than even Telugu. The Halmidi inscription dated to 450 AD may be the oldest inscription in Kannada. However, it has been recently suggested that an Asokan rock edict found in Brahmagiri in Karnataka dated to 230 BC contains Kannada words, proving that the language existed well before the Christian era.

Although it is clear that Dravidian languages originated independently from Indo-Aryan languages despite having been influenced by them to varying degrees, the inter-relationship between early Dravidian languages remains unclear. Although the existence of an early hypothetical Proto-Dravidian language has been postulated, another more plausible or a likely explanation is that such a language never existed, and the term proto-Dravidian may at best be used to describe a loose conglomeration of early Dravidian dialects used in different geographical contexts.

The linguistic scenario in Mughal India

The term Hindusthani perhaps began to be widely used during early the Mughal era, even though Sufis may have used the terms earlier and Persian words were also widely incorporated into the language due to the influences of the Mughal rulers who were normally fluent in a dialect of Persian similar to the 'Dari' dialect of Afghanistan. However, Hindusthani and Urdu languages were primarily descendants of the earlier Prakrits spoken in the region, and the use of the term Hindi or Hindavi predated this era, and was already a literary language by 1200 AD. Persian was chiefly a literary or a court

language in Mughal India, and most Mughal emperors held the Persian language in very high regard. There are also copious inscriptions in Persian in many parts of India, particularly North India, and these can be found on tombs and monuments. Books in Persian have also existed from early in the Mughal era. Persian also influenced other Indo-Aryan languages such as Sindhi and Punjabi very greatly and other languages such as Bengali to a much smaller extent. Parsi migrants also believed to have first landed on Indian soil between 800 AD and 1000 AD, eventually abandoning their native languages for the languages of India, assimilating themselves completely linguistically, yet practising their original faith. After the decline of the Mughal Power and the rise of the British Raj, Persian was gradually replaced with English as the language of the elite, and this shift appears to have happened primarily in the 1830's and the 1840's.

The linguistic scenario during the British Raj

The English language was first perhaps taught to very small groups of Indians by missionaries in the later 1600's when the British were establishing themselves as traders on Indian soil. However, at this time, the use of the English language in India was perhaps insignificant. The importance of English in India began to grow gradually throughout the Eighteenth century as Mughal power declined and British power increased. In the late 1700's it is even claimed that an Indian by name Sake Dean Mahomet wrote a travelogue in English becoming the first Indian author in English. However, prior to the 1830's, English was not widely and formally taught to Indians in India although many officials used it widely and many Indians learnt it. English language public instruction began in India in the 1830s during the rule of the East India Company. In 1837, English replaced Persian as the official language of the administration and the courts. Lord Macaulay or Thomas Babbington Macaulay played a major role in introducing English and western education in India and helped transition the official language from Persian to English. According to a proposal put forward to Governor General William Bentinck "a class should be formed in India, a group of people who would act as interpreters between the British and Indians, a class of persons, Indians in blood and colour, but English in taste, in opinion, in morals and in intellect" (Bailey 1991: 138). In the subsequent decades, many English schools were opened across British India with some even adopting English as the exclusive medium of instruction. By the 1850's preference was given in government jobs to Indians who had a working knowledge of the English language. In the second half of the nineteenth century, many western-style universities were established in major provincial capitals. Towards the end of the Nineteenth century, the use of the English language further increased throughout India, and even played a role in India's freedom struggle given its linguistic diversity and the lack of any other lingua franca at the time. At that time English was seen as the only viable lingua franca of the sub-continent, and was used in virtually every province as a preferred medium of higher education, administration, trade or commerce. Education in vernacular languages was usually only limited to the primary level. In spite of all this, the use of English was at best restricted to elites and the educated classes and was seen as alien to the masses. Hindusthani was also sometimes spoken outside North India, particularly parts of Western India, but was not as commonly used as English as a written language outside its heartland. Interestingly, the widespread use of English in India is less than two centuries old, and in a very short period, has managed to alter the linguistic landscape significantly, and has greatly impacted local languages as well. However, its usage is extremely limited in the religious or cultural spheres and it is unlikely that it can ever supplement or subordinate Indian languages completely.

The linguistic scenario in Post-independent India

After India won its independence from the British in 1947 after a long struggle, the leaders of the newly-born Indian nation felt a need to unite the many linguistically-diverse regions of India with a

common, universal language. Mahatma Gandhi felt that a common language was one for the prerequisites for the emergence of India as a united nation. He laid out five key requirements for any language to be accepted as the national language:

1. It should be easy to learn for government officials.
2. It should be capable of serving as a medium of religious, economic, and political intercourse throughout India.
3. It should be the speech of the majority of the inhabitants of India.
4. It should be easy to learn for the whole of the country.
5. In choosing this language, considerations of temporary or passing interests should not count.

Mahatma Gandhi's thoughts on the question of national language date back to as early as 1906, when Mahatma Gandhi wrote in his book *Hind Swaraj or Home Rule*, that the national language should be Hindi with the option to use both the Nagari and the Persian characters to foster Hindu-Muslim unity. Mahatma Gandhi also supported Hindusthani at times as a tool of integration between Muslims and Hindus, and many of his later speeches and writings favoured Hindusthani over Hindi. This position was also supported by the 1928 Motilal Nehru report. Mahatma Gandhi also often emphasized the importance of provincial languages, and the seeds for linguistic provinces were sown in the early 20th century itself. For example, the Indian National Congress in 1917 decided to constitute a separate Andhra Congress Provincial committee, and a consensus was also slowly emerging that administration had to be provided in a language that was understood by its people. In spite of a potential conflict between Hindi or Hindusthani as a national language and the concept of linguistic provinces, however, the Congress, at that time naturally wanted to avoid partition and show that it was not opposed to the interests of the Muslims, and emphasized religious harmony over linguistic identity. As English was widely seen to be a symbol of oppression and slavery, Mahatma Gandhi and most others only favoured a limited use of English in fields such as scientific endeavour, diplomacy and international trade, and most certainly not at the expense of Indian languages. Mahatma Gandhi and other leaders of India's freedom movement were critical about the role of English in India, claiming it led to intoxication, subordination of national interests, distortion of cultural values, denationalization, a stifling of innovative and creative thinking and a slavish mentality. Mahatma Gandhi also blamed English for the lower level of competence achieved in other subjects. He claimed, for example, that had he been taught in Gujarati, he would have learnt Euclid's theorems in half the time.

After Partition, the support for Hindusthani declined drastically, and there were moves to purge Hindi of Persian loan words and emphasize its Sanskrit vocabulary. Hindi zealots also appear to have profited immensely from Gandhi's avowed preference for Hindi or Hindusthani over English, and Hindi nationalists such as Purushottam Das Tandon, Seth Govind Das, R V Dhulekar, Babunath Gupta and Ram Manohar Lohia fought heroically in favour of Hindi, often adopting dogmatic positions over consensus-driven approaches, and as American scholar and expert of the Indian constitution late Granville Austin observed, at times creating deep schisms in the parliament and even going to the extent of imperilling India's national unity.

Among all the anecdotes that would serve to illustrate the above, none has perhaps become more firmly etched in the minds of people than this: On the 10th of December 1946, R. V. Dhulekar of the United Provinces moved an amendment and began speaking in Hindustani. The Chairman then reminded him that many members did not know the language. This was Dhulekar's reply: "People who do not know Hindustani have no right to stay in India. People who are present in this House to fashion a Constitution for India and do not know Hindustani are not worthy to be members of this Assembly. They had better leave". The remarks created a commotion in the House. "Order, order!", yelled the

Chairman, but Dhulekar then moved that the Procedure Committee should frame rules in Hindustani and not in English. "As an Indian I appeal that we, who are out to win freedom for our country and are fighting for it should think and speak in our own language (in singular form). We have all along been talking of America, Japan, Germany, Switzerland and House of Commons. It has given me a headache. I wonder why Indians do not speak in their own language (again, in singular form). As an Indian I feel that the proceedings of the House should be conducted in Hindustani. We are not concerned with the history of the world. We have the history of our own country of millions of past years. I request you to allow me to move my amendment."

The Chairman: Order, order! I do not permit you to proceed further. The House is with me that you are out of order.'

After much deliberation and consternation in some circles, the Indian constitution, in 1950, declared that Hindi in the Devanagari script would be the official language of the union. International numerals would however be used. Unless Parliament decided otherwise, the use of English for official purposes was to cease 15 years after the constitution came into effect, i.e., on 26 January 1965.

The union government took many steps to promote Hindi with great zest and zeal. The Indian government either set up new institutions or strengthened many associations such as the Dakshin Bharat Hindi Prachar Sabha which already existed at the time of independence to promote Hindi throughout India, even as Nehru and others insisted that Hindi would never be imposed on non-Hindi speaking peoples. The government also funded writers, poets, and translators to produce works in Hindi. Committees were formed to develop Hindi in order to give it a more comprehensive vocabulary which would allow it to discharge its official functions with much greater ease and efficiency. Even though Hindi was clearly the preferred choice in political circles, there were many blocks to its achieving success as the national language. One of these was the high position of English—a position it has retained until today despite the plan to phase it out of all government communications by 1965. However, because of English's importance internationally and the many advantages conferred upon those who could speak it, the study of English continued with even greater vigour than before, whereas the study of Hindi was neglected in many regions where people felt very little or no need for it. This ensured that a large section of the educated workforce who joined government services needed to use more of English than Hindi in doing their jobs. Accordingly, English has not only shared its position as an official language with Hindi but has also relegated Hindi to second-class status. Interestingly, both English and other Indian languages have proven to be the biggest roadblocks in Hindi's quest for unbridled supremacy, and many have all along opined that English and other Indian languages should formally share Hindi's role as an official language of the Central Government. In a nation of mind-boggling diversity such as India, this was probably *sine qua non*.

Another thorn in the flesh for the hegemony of Hindi was the formation of linguistic states. While the idea of linguistic states predated independence, the movement for linguistic states got a fresh impetus in the 1950's, and speakers of Marathi, Kannada, Oriya and later Gujarati wanted their own states. However, the strongest demand for linguistic states came from Andhra Pradesh where Potti Srimulu, a long time disciple of Gandhi fasted unto death and became a martyr for linguistic states. This led to the division of India on linguistic lines, and naturally weakening the case for Hindi further. Interestingly, no attempts appear to have been made to re-examine the language policy in the light of the formation of linguistic states. Supporters of Hindi also never appear to have understood the role of trade, commerce, industry and the private sector in both directly and indirectly espousing the cause of English, and all their efforts were bereft and devoid of vision and clarity and were doomed to end in failure.

Sometime in early 1965, when the associate official status of English was due to end, attempts were made to impose Hindi by brute force in Tamil Nadu, sparking widespread protests in the state. This was not the first time there were Anti-Hindi agitations in Tamil Nadu. The Tamils had been protesting the proposed national language policy since the 1930's, and were often joined by smaller groups of people from the West, East and other parts of South India, and opposition to India's proposed language policy in Tamil Nadu was almost universal. Although British divide-and-rule techniques and outdated historical models may have played a role in dividing North and South, as well as other cultural differences, it was clear that India's proposed language policies would be highly discriminatory against Tamils and other non-Hindi speakers. Firstly, it would require the students of some states to learn three languages while others could get away by learning two. Secondly, Hindi-speakers in the Hindi speaking states would learn it as their native language, while others would learn it as a foreign one. Thirdly, Hindi speakers in Hindi-speaking states would learn Hindi as a first language, while others would learn it as a second language. Within a few years, this kind of a policy would enable the native speakers of one language to take over the job market through unfair and unethical methods. Even Rajagopalachari, who had earlier espoused the cause of Hindi, had changed his stand in due course, and became an opponent of the language policy. In 1967, the DMK won the election in Tamil Nadu on the plank of India's alleged discriminatory language policy. The Union Government was then left with no other option but to permit the use of English in the workings of the central government and in inter-state communication indefinitely. This naturally dismayed Hindi zealots, many of whom had worked hard, for example, to ensure that examinations like All India Civil Services Examinations would not be conducted in any language other than Hindi, and many of them saw it as treachery and betrayal.

The Angrezi Hatao Andolan or the Banish English campaign was a very strong and emotive movement in the early years of independent India; key leaders of the movement were Ram Manohar Lohia and Atal Behari Vajpayee and cities like Allahabad and Lucknow were eminent centres of the movement. As the country had gained independence from the British the English language was considered passé and a symbol of a bygone era and had to be phased out as quickly as possible keeping in mind the provisions of the constitution which favoured phasing out of English by 1965. By all accounts, this movement was a failure as it strongly reeked of parochialism, and came to be decried as Hindi imperialism- it had few if any supporters in the West and East, and had virtually no supporters in the South. However, the learning of English did greatly suffer and stagnate in the 1970's due to India's inward looking and autarchic policies and the thrust given by governments of both Hindi and non-Hindi states to Hindi or their own respective languages. Some states like West Bengal took much more myopic and ill-conceived stands: not only was Hindi never taught, but the learning of English was effectively abolished at the elementary school level, only to be reintroduced many years later.

In late 1984, Indira Gandhi was assassinated and the baton passed on to her son Rajiv Gandhi. Although his tenure as Prime Minister was short, the changes he brought in proved to be irrevocable, and the reforms he ushered in were continued by his successors across political parties. Globalization and liberalisation, besides the ubiquity and pervasiveness of English on cyberspace, have made English a window to the world, and interest in English has since increased by leaps and bounds, and has entrenched itself more than ever before in India's history.

However, India's language policy is still perceived to be illogical and differences of opinion continue to surface from time to time between the central government and the states and between politicians belonging to various political parties. A minor agitation also took place in Tamil Nadu in 1986 against the opening of Navodaya schools in the state where Hindi would be mandatory, and in 2014, minor protests erupted as a result of the Modi governments Hindi push. In February 2015, India's HRD minister Ms Smriti Irani hailed India's linguistic diversity and seemed to acknowledge not only the fact

that politically-driven attempts to homogenize India's diverse cultures would come to naught, but also seemed to agree that there was no option but to celebrate India's cultural and linguistic diversity. Speaking in a conference in Chennai, she said "Multilingualism in our nation extends back to several millennia. This multilingualism is an asset, a heritage we have inherited, and is in fact a resource we deeply cherish. There are more than thousand mother tongues spoken in our country. This is not just a number but a reason to be proud of."

Observation on language spread in multi-lingual societies

Having taken a linguistic swoop and a birds-eye view of the various forces that have shaped India's linguistic history since the dawn of its history, we now make use of our experience to make some observations on language spread in multi-lingual societies, and define and formulate principles of language spread as understood from India's long history, wherever possible or practicable, and supplement them wherever applicable with experiences from across the world to facilitate a more holistic view. This paper is targeted at a clearly-defined audience which includes policy-makers, educationalists, sociolinguists and arm-chair scholars who in the normal course of events, are concerned with the formulation of policies in, or are concerned with the effects and the fallout of such policies in multi-lingual and multi-ethnic societies, and is as such written from their point of view. The observations made in this paper, it is also expected, will also contribute to the theoretical framework of the emerging field of Language Dynamics.

1. Affinity between language and culture and language as a symbol of ethnic identity

The affinity between language and culture and language as a symbol of ethnic identity has pre-occupied many generations of scholars. This study has now been formalized thanks to the emergence of a new field of study called Sociolinguistics or the study of language in relation to society. Such studies have been throwing new light not only on the nature of language but on the nature of society as well. Language, which may be defined as "A purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols." (Sapir 1921:8) According to Bloch and Trager, "A language is a system of arbitrary vocal symbols by means of which a social group co-operates." (1942:5) According to British Anthropologist Sir Edward Tylor, "Culture or Civilization is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society." (Kroeber and Kluckhohn 1952:81). According to Marvin Harris, "A culture is the total socially acquired life-way or life-style of a group of people. It consists of the patterned, repetitive ways of thinking, feeling and acting that are characteristics of the members of a particular society or segment of society." (1975:144) According to Ward Goodenough, "A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. Culture being what people have to learn as distinct from their biological heritage, must consist of the end-product of learning knowledge, in a most general sense of the term." According to Clifford Geertz, "Culture is the fabric of meaning in terms of which human beings interpret their experience and guide their action; social structure is the form that action takes, and is the network of social relations. Culture and Social structure are different abstractions from the same phenomena." Ethnicity, likewise, refers to a sense of identity among a group based on a sense of common heritage, language, religion, or any other aspect of culture. Ethnicity, may manifest itself in a desire to lead one's lives according to one's traditions, maintain status quo in the light of changes to society or fights for one's rights whenever one's way of life or cherished beliefs are threatened. The term 'culture' has many ramifications; most anthropologists such as Margaret Mead, Julian Steward and Abraham Kardiner acknowledge it impacts personality as well, and group behaviour. Anthropologists such as Marvin Harris (1983) have introduced concepts such as *national character*. Language and culture are likewise inter-related due

to many factors such as semantic relativity and verbal intelligence, and Linguistic Anthropology is emerging as a major field of study in its own right. There are several possible relationships between language and society. One is that social structure may either influence or determine linguistic structure and behaviour. A second possible relationship is that linguistic structure and behaviour may either influence or determine social structure and the speakers' worldview. A third possible relationship is that the influence is bi-directional and that language and society may influence each other. A fourth view held by a small but slowly increasing number of scholars is that the roots of language are much deeper and that language and language structure may even have their roots in genetics. Such relationships between language, culture and society form the bedrock of the emerging field of sociolinguistics.⁸

The centrality of language to culture also varies widely from community to community, and this aspect may need to be understood by planners as well. Not all traits exhibited by various ethnic groups may be seen to be desirable in a global context. Some may exhibit a high degree of ethnocentrism, consciously or unconsciously, and may in part be even driven by inward-looking approaches and a lack of awareness of other cultures. Ethnocentrism has been observed in many cultures across the world, cultural relativism being the exact opposite point of view. In any case, Community sentiment, which R.M. Mclver and Page associate with a "we-feeling" and a "role-feeling" is common throughout the world. In India, language is seen to be more central to culture in the South and East of India than in the West or the North, and linguistic pride is particularly high among some groups such as the Tamils many of whom strive for linguistic purism. Deification of language is also common among the Tamils and the song "Invocation to the Goddess Tamil" is the official song of the government of Tamil Nadu. Such a feeling can also be found among the Telugus, though to a much smaller extent, and the song "To my Mother Telugu" is likewise the state language of Andhra Pradesh. Research is ongoing into the extent of social and linguistic accommodation of different cultures, variations of which include assimilation and adjustment, and all these factors should have a bearing on language policies as well. These may vary widely from group to group, and must be evaluated on a case to case basis.⁹

According to the Sapir-Whorf hypothesis, language is a major determinant not only in shaping culture but also in determining attitudes and thinking patterns. Some scholars also talk about Verbal intelligence, and this would be greatly determined by language. Thus a speaker of a particular language whose uses many variations for a technical term is able to mentally conjure up variations of the same theme much more easily, than a speaker of another language whose vocabulary may be limited in this regard. Languages also have unique words to express concepts that are specific to a particular culture. For example even English may lack some words which are found in French, Japanese or Chinese. Likewise, each language is made up of linguistic items which may vary from context to context. Thus, it has been argued by some scholars that language constitutes a thought world, and people who speak different languages, or the same language to varying degrees of proficiency inhabit different thought worlds. This may be described as some form of a linguistic determinism. As a result of this analogy, we can argue that while dialects may die out fairly or relatively easily, full-fledged languages representative of cultures may not.

Another key metric that may have a bearing on this is Linguistic distance which is the measure of the dissimilarity of languages or how different one language or dialect is from another in multiple dimensions such as vocabulary, grammar, pronunciation, script and phonetic inventories, and in the recent past, many formal approaches have been proposed to measure this distance such as

⁸ Sociolinguistics, R.A. Hudson Cambridge University Press 1980

⁹ The Language Instinct, Steven Pinker Penguin Books 1994

Levenshtein distance (LD) and the approach proposed by Chiswick and Miller in 1999. Linguistic inequality is another measure that may come into play here, and this hypothesis that that different languages may be in different states of evolution. A dialect which includes both formal and written dialects or unwritten dialects, must likewise be distinguished from a full-fledged language. Therefore, speakers of different languages have different attitudes towards their own languages or towards other languages which may be perceived as superior or inferior from their point of view. Scholars such as Hymes also talk about the historical character of a language which would be a function of its historical tradition and contemporary usage, status and prestige. For example, many Thais consider the Lao language to be inferior, while many Laos tacitly accept the 'cultural superiority' of the Thai Language. Likewise, Tamils are aware of the hoary literary traditions in their language and its unique characteristics.¹⁰ Most linguists accept the theory of inequality of languages, and the French use the term 'Langue de Culture' to distinguish culturally evolved languages from less evolved ones. Another related concept in Sociolinguistics is the concept of linguistic ideology. Judith Irvine defines the concept as "the cultural system of ideas about social and linguistic relationships, together with their loading of moral and political interests." Many new fields such as Psycholinguistics which deals with the mental processes associated with language, and Ethnolinguistics which deals with social interactions and its relationship with language are emerging as distinct fields of study. Such factors are also determinants of the effects of language in fostering cultural pride or a sense of ethnicity among speakers of different languages.

All the factors described above would naturally create variations in perception and outlook between say, a Hindi speaker, a Manipuri speaker and a Tamil speaker which in turn would shape attitudes towards language and language policy. Linguistic issues and, in particular, the treatment of minority languages are have a high emotional appeal, and have often resulted in explosive situations in the past all over the world. As Bretton (1976, p. 447) points out: "Language may be the most explosive issue universally and over time. This is mainly because language alone, unlike all other concerns associated with nationalism and ethnocentrism ... is so closely tied to the individual self. Fear of being deprived of communicating skills seems to raise political passion to a fever pitch."

Thus, any language policy in a multi-lingual society must take into account the affinity between language and culture for different languages or ethnic groups, and the attitudes of various ethnic and linguistic groups towards various proposals, policies and paradigms, and such studies must be carried out devoid of pre-conceived notions or biases. These of course would be only one of the constituent factors responsible for the success or the failure of a language policy, and the other factors discussed in this paper would come into play as well.^{11 12}

2. The nature of the society and the extent of diversity can play a role in determining dynamics of language spread in a multi-lingual society

In this section, we seek to drive home the point that while ethnic rivalries and the desire to maintain and foster ethnic and linguistic identity have manifested themselves time and again in almost all parts of the world, their contexts, their form and their degree may vary from scenario to scenario, and there have been many cases where such tendencies have scarcely been observed. Therefore, our key observation and conclusion is that a one-size-fits-all approach can never be adopted here, and it would be necessary to study each case separately using some of the principles proposed in this paper. The anti-Hindi agitations of Tamil Nadu in response to the National language policy of the Indian central

¹⁰ Hymes. D (1974) Foundations in Sociolinguistics. Philadelphia: University of Pennsylvania Press

¹¹ Linguistic imperialism Robert Phillipson Indian edition Oxford University Press

¹² A Course in Linguistics Tarni Prasad PHI learning Pvt Ltd, 2014 Delhi

government are well-documented and took place several times both before and after India's independence. These had the political backing of almost all the parties in the state and had wide public support as well. Contrary to public perception, anti-Hindi agitations took place in other non-Hindi states, although their intensity was much less severe. Linguistic pride has manifested itself in many other forms as well since India's independence, and this includes the demand for the creation of the linguistic states which first began in the Andhra region in the 1950's. The concept of linguistic states soon found favour among Marathi and later, Gujarati speakers as well, and India soon found itself divided on linguistic lines. Marathi chauvinism and likewise other forms of parochialism in other parts of India have likewise manifested themselves from time to time, and in the case of the former, in the form of attacks against North and South Indians, and it is very obvious with hindsight, that any attempts by the Central government to steamroll other Indian languages would never have worked. Thus, the demand for linguistic states or the demand for the continuance of English as an associate official language were not handed over on a platter; they were fought for, and the former led to the death of a popular leader. Far from becoming independent India's Achilles heel, they actually fostered national integration as some states exchanged independence for autonomy. Anti-Hindi agitations, as it is popularly believed, led to the deaths of around five hundred civilians in Tamil Nadu itself, although reliable estimates are unavailable. On the other hand, there have been many exceptions to the notion of linguistic chauvinism and the desire to fight for linguistic rights. In Tamil Nadu itself, one finds many tribes such as the Todas, Irulas, Kurumbas and the Kotas who speak some form of a Dravidian language, but wholly distinct from Tamil. Their combined population is less than the five-digit mark, and although they have a strong sense of ethnic affiliation, and have tended to preserve their identity against all odds, there is virtually no resentment against the unquestioned hegemony or political power of Tamil in the region. Another such example is the Chenchu tribe of Andhra Pradesh who number about 30,000 people, and speak a Dravidian language distinct from Telugu. The relatively small numbers of all such tribes, and their strata in society possibly contribute to their lack of political awareness. Interestingly, Karnataka is perhaps much more linguistically diverse than the other three south Indian states, and among the languages of the state are Tulu (a Dravidian language with around two million native speakers), Konkani (An Indo-Aryan language spoken in Karnataka, Goa and Maharashtra by seven million native speakers), Kodava language (a Dravidian language with 200,000 native speakers) and Beary (a Dravidian language with 1.5 million native speakers). Speakers of these languages belong to different strata of society including educated professionals and boast a large overseas population as well. With the exception of Konkani, the others are barely written languages despite some sporadic initiatives to develop them into written languages. Therefore, speakers of these languages have more or less accepted bilingualism, and have accepted the hegemony of Kannada in the state, with written instruction in schools being received in Kannada or English. They have also no significant track record of fighting for their linguistic rights or for the creation of linguistic states based on their languages, and have allowed their languages to be subordinated by Kannada. There is however, a various obvious reason for this: widespread literacy in the region may have been relatively recent and may date back to a couple of centuries at the most. It was likely that Kannada was the vehicle in which wide-spread literacy spread as Tulu, Beary and Kodava were never written languages. Thus no change of status quo was involved. The same can also be said of Rajasthan, a state justifiably proud of its culture and ethos. Rajasthani which is viewed by many linguistics as a dialect of Hindi is barely a language of instruction in schools in the state, and has allowed itself to become subservient to Hindi. Bhojpuri, which some linguistics accept as an independent language, and has a flourishing entertainment industry and over a hundred million native speakers, much higher than any of the Dravidian languages, is a case in point, and has allowed itself to become subservient to Hindi. Only in recent times is there awareness of linguistic rights in the region, and speakers of languages or dialects such as Bundhelkhandi, Bhojpuri and Mythili (a language older than even Hindi) have made feeble

attempts to demand linguistic states as well. An approach of speakers of these languages, may have been to evaluate the Hindi vs English debate from their own standpoint and take a stand that would favour their own community's interests. However, in the post-globalized era, the scales are inexorably tilting in favour of English, and the English juggernaut has become unstoppable.

Tamil speakers for example, may also exhibit a greater desire to assimilate into the local populations in specific contexts, examples being Tamil speakers in Canada or France or even Maharashtra, and the native vs immigrant question may also play a role in determining the dynamics of language spread. This may have been one of the factors that lead to the suzerainty of the English language in the United States, in the early years of the existence of that nation, in conjunction with its diachronic rise elsewhere, and the slow and natural death of Cajun French in Louisiana in more recent times. On the other hand, Quebecers who were immigrants from France, have fought bitterly for their linguistic rights, and have attempted to severely curtail the use of English in daily life. French in Quebec has provided a kind of a bulwark against the languages steep and seemingly irreversible decline in other parts of Canada. Many immigrants into Mumbai have also adopted Hindi in lieu of Marathi as some kind of a native language, as also migrants in many parts of North India, leading to some kind of linguistic homogeneity, but this has thus far not been able to override all the other factors working against Hindi. The English speaking elites in India were also known to have encouraged the use of English even in informal situations to create a social distance between themselves and other less-privileged individuals especially in the early years of independence, and often treating Indian languages demeaningly and with contempt. Sociologists believe this was one of the factors that led to the continuation of English in India as an icon of elitist power until the onslaught of globalization. We may therefore introduce a new term here 'Change of status quo', which involves a change in functions or the role played by a language in society in a manner that affects a large number of its speakers. Such changes do not come often, but they are an inevitable jackpot for any linguist in that they provide a rare opportunity to understand the principles of language spread.

Thus, it must be emphasized here, that no one-size-fits-all approach is possible in this regard, and each case must be evaluated separately. Approaches followed by speakers of different languages may also change over a period in time. On the other hand, one can try to gauge the reaction of speakers of different languages if a language other than Hindi had been adopted as the official language of the Central government. Similar inferences can be drawn from a study of linguistic groups outside India as well, and the French have proven to be the most vigorous defenders of their language against the onslaught of English both in Quebec and Europe. In a country like India which is clearly multi-ethnic unlike China, and is only a loose confederation of nations, with many regions claiming trade and cultural contacts with other parts of the world more than even the Hindi heartland, even a superficial study should have convinced policy-makers of the futility of pushing the Rajbhasha despite opposition, but alas, that did not happen. The key determinants that would influence the spread of languages in multi-lingual societies are the extent and innate nature of linguistic and cultural diversity, Inherent strength of minority languages, Awareness and education among minorities, Bargaining power of parties, Native vs immigrant nature of speakers, Ethnic composition, Change of status quo etc. ^{13 14 15}

^{16 17}

¹³ Indian Anthropology R N Sharma Surjeet Publications, New Delhi

¹⁴ Fundamental of Sociology C N Shankar Rao Jai Bharath Prakashana Mangalore

¹⁵ General Anthropology Nadeem Hasnain Jawahar Publishers and Distributors New Delhi 1992

¹⁶ Anthropology The study of man Dr Indrani Basu Roy S. Chand and company New Delhi 2003

¹⁷ Cultural Anthropology Barbara Miller Pearson Education Inc. 2011

According to most estimates, India is by far the most multi-lingual country in the world with twenty-two official languages and more than five hundred living dialects. While Papua New Guinea, Indonesia and Nigeria may have a larger number of languages than India in theory, the number of official languages in those countries are less in number. Also, India is unique in that many of the languages in India are highly developed, literary languages, and it should be fairly obvious that no other country in the world has such a large number of written, literary languages with traditions, in some cases, going back two thousand years or more. There are several language diversity indices currently in use. One is Greenberg's LDI. One is the related Index of Linguistic Diversity from Terralingua.org which emphasizes changes in linguistic diversity, while another LDI measure has been proposed by the United Nations Educational, Scientific and Cultural Organization. While all measures unanimously place India's LDI far above China's (the latter can hardly be considered multi-lingual from our point of view), most of these measures have intrinsic limitations in that they fail to consider Linguistic Distances, the state of evolution of languages, political boundaries and other political and cultural factors. We propose the following Twelve measures to determine if a country is truly polyglot or not, and the result would be deemed to be positive if the answer to even one of the questions is in the affirmative.

- (a) Does the country have one or more than one fully independent languages spoken by significant segments of the population, which are not for the purpose of our study deemed to be dialects of the other language or languages spoken in the country?
- (b) Is the linguistic distance between the most-unrelated but widely spoken languages in the country large?
- (c) Does the country comprise of speakers belonging to more than one language group? Are the speakers of languages belonging to at least two language groups significant?
- (d) Do the speakers of more than one language adopt a semblance of political power, or are demanding political autonomy with the chief objective of maintaining linguistic status quo or linguistic hegemony?
- (e) Does the country have a history of discord in protesting the linguistic power structure or the dominance of one linguistic group, and have such fissures led into demands for significant changes in power structure or autonomy?
- (f) Is the power structure of the country sufficiently decentralized to allow speakers of linguistic groups to exercise some autonomy or have a say in policy-making?
- (g) Do the speakers of the most widely spoken language in the country account for less than sixty percent of the population?
- (h) Is the total number of languages and dialects in the country, including less developed languages or dialects, and variants of major languages, large?
- (i) Do regions of the country share close economic, cultural or linguistic ties with other country, often in precedence to economic, cultural or linguistic ties with other parts of the same country?
- (j) What is the Least Common Denominator of all the major linguistic groups in the country in terms of linguistic structure, shared cultural elements etc.? Is the range of the LCD insignificant to moderate?
- (k) What is the Least Common Denominator of all the linguistic groups in the country including the outlying or the less important or the insignificant ones in terms of linguistic structure, shared cultural elements etc.? Is the range of the LCD very insignificant to moderate?
- (l) Is the Chief integrating factor in the country something other than language, or is the role of language in this regard limited?

If the answer to one or more of the above questions is in the affirmative, the country, by our reckoning, is deemed to be polyglot. In the case of India, the answers to all the questions would be a resounding yes, and in such a case, few would deny that some form of enforced multi-lingualism would be conducive to national integration. India may be thus considered truly polyglot compared to China: In China, for example, speakers of Cantonese and Mandarin may at times even claim that they speak the same language. However, speakers of various dialects of Chinese may not be able to converse with each other easily or at all: from a linguists' point of view, they may actually speak different languages, and the distance between the various dialects of Chinese is large. However, they will be able to communicate with each other much more effectively through their shared writing system. While India has undoubtedly had had periods of political unity since ancient times, and pan-Indian cultures have exhibited a fairly high degree of underlying cultural or religious unity, India's common bonds are more cultural than linguistic; this is despite that fact that various Indian languages and language groups have influenced each other, and the fact that some ancestor of Brahmi morphed into all modern day alphabetic scripts, North and South Indian. For the Chinese, on the other hand, a shared writing system and a shared linguistic inheritance along a strong tradition of political, social, and cultural unity constitute their identity. India is truly multi-lingual from a linguist's point of view, while China is not.

3. The role of a Lingua Franca in Multi-lingual societies

When people speaking different languages come into contact with which each other, they must find some way of communicating, and this normally happens through a lingua franca. In a publication dating to 1953, UNESCO defined a lingua franca as 'a language which is used habitually by people whose mother tongues are different in order to facilitate communication between them.' The opposite term of lingua franca is 'Vernacular'. The term lingua franca is derived from a particular example of lingua franca i.e. Frankish. A variety of other terms can be found which describe similar concepts. Most current research of the characteristics of a lingua franca is unfortunately limited to the linguistic structure of a language, its lexicon, its adaptability and suitability to various non-native groups, and its ease of pronunciation, and even more unfortunately current research on lingua francas appears to be English-centric. Samarin (1968, p. 661) lists five potential types of lingua francas: a trade language (e.g., Swahili in East Africa); a contact language (e.g., Greek in the Ancient World); an international language (e.g., English throughout much of our contemporary world); and an auxiliary language (e.g., Basic English) or in some cases, non-linguistic codes. They usually develop as a consequence of population migration, interaction between speakers of different languages or for purposes of trade, commerce or international communication. Still another kind of lingua franca are mixed and pidgin languages. English-based pidgins, for example, allow people speaking different languages to communicate, and yet, allow access to many people who cannot master English vocabulary and grammar. In earlier times, Greek and Vulgar Latin were in widespread use as lingua francas in many parts of Europe. Even today, Arabic, Mandarin, Hindi, and Swahili serve as lingua francas but in their own limited or unique ways. Today, English is used in many places and for many purposes as a lingua franca, e.g., in trade, commerce, science, technology and international relations. This is certainly the case in India, where even though Hindi is the official language, English is widely used in many contexts as a lingua franca. Swahili is a lingua franca of East Africa and in its various forms, has played many roles in many countries in the region, and Tok Pisin is a popular lingua franca in polyglot Papua New Guinea.

The theory that multi-lingual societies need a common language or even a lingua franca has not always stood up to scrutiny that has been disproven not from our study of ancient and modern India, but also from preliminary observations across the world and many multi-ethnic societies have proven to be

stable without the underlying need for a common lingua franca or any common cultural bonds. In such cases, a lingua franca is dispensed with because of the bi-lingualism or multi-lingualism of a majority of its citizens. Examples of nations that may have actually used multi-linguicism to foster national integration in modern times are Canada and Switzerland, where a common language spoken by all the population has so far proven elusive, despite the rapid spread of English in the case of the latter. However, a common language or any other cultural icon in the absence of such a spoken or written language can greatly foster integrity and communal harmony in a multi-ethnic societies if used properly and in a manner that is not inconsistent with the dynamics of language spread in multi-lingual societies, and common experience has shown that whenever such a lingua franca is available, it usually spreads or is used in a manner that would be determined by the other principles of language spread in such societies as described in this paper. Examples of this are Sanskrit in Post-Harappan India, and English in Post-independent India. Alternatively, other cultural icons can be readily used to foster integration, and in we consider, the case of the Indus Valley Civilization, the Indus script appears to have played a role in providing a modicum of ethnic harmony, in addition to the possible multi-lingualism of many of its citizens.

The ready availability of a lingua franca would be a determinant, and should such a language be readily available, it may be brought in fairly quickly into the linguistic equation, and often without any intervention. In Harappan times, clearly no such language was immediately available at hand, and therefore society made do without it and other cultural symbols defined the pan Indus ideology. A Lingua franca may either be internal to the region or may be imported. In the present post-globalized scenario, a global and ubiquitous lingua franca like English could easily be imported to fulfil specific needs pertaining to global communication, and may be readily used by society to fill in such a void. The usage of English in any multi-lingual society such as India would therefore be the sum total of the role played by such a language in scientific pursuits and international communication given that languages importance in that regard, and the role played by such a language in the society's internal communication given its multi-lingual nature. In many post-colonial societies that were polyglot, colonial languages such as English or French have firmly entrenched itself given the inability of such societies to provide any other lingua franca that was acceptable to all or majority of internal stakeholders or that could fulfil all or majority or roles. Brutt-Griffler, for example, suggests that external factors alone do not contribute to the spread of a language, and that various internal situations in a country may encourage such a spread. This would involve some degree of pain, and as Fishman, Conrad and Rubal-Lopez have pointed out, acquiring a new language requires changes in language behaviour of speakers. According to Cooper, a new language requires awareness, evaluation, awareness and use, and the rapid spread of English in post-independent India is in large part an indicator of the failure of the nation's language policy. One interesting example to illustrate multi-linguicism is the case of the Tucano tribe who live along the Vaupes River in Columbia and smaller parts of Brazil in South America and practice linguistic exogamy, normally marrying outside their linguistic group. It is not therefore, uncommon for a member of a tribe to speak several languages. However, Tucano is used as some kind of a lingua franca in the region, owing to its ability to fulfil a need that other languages of the tribe cannot.

We can also make another key observation here. The demand for a lingua franca normally tends to increase as the level of social cohesion and the interaction between various linguistic groups increases. In other words, where there is very little or no social or economic interaction between the speakers of different languages a multi-lingual society, the demand for a lingua franca is lower, and internal communication in such cases may be served by multi-lingualism. The social or economic interactions here can be either driven by trade or economic factors or can be politically-driven as in the case of an

over-arching political framework demanding a high degree of interaction between ethnic groups. Examples of these include the European Union. It may also be observed that in an era characterized by the rapid spread of science and technology, and improvement of transportation technology, the level of social cohesion tends to increase even if not warranted or necessitated by political forces, and therefore the demand for a lingua franca is likely to increase. Thus, modern multi-lingual societies are likely to be characterized by the presence or availability of a lingua franca which may or may not be officially sanctioned for the purpose. Countries like Qatar and Oman, for example, have adopted English very widely in recent times without direct contact with any colonizer or without major government initiatives for the teaching of English, and these are clear examples of language spread through the power of modern technology.

Experience in India and other parts of the world has borne out the fact that a neutral language or a language that is not native to any ethnic group within the society is ideally-suited to become the lingua franca of that society. Sanskrit, Persian and English have played these roles in different periods in Indian history with varying degrees of success. But there may be exceptions. Although Hindi has clearly failed to displace English in post-independent India, Hindi has spread at certain level in post-independent India, compensating only for the two chief weaknesses of English as a link language: While no one denies its importance of English in post-globalized India, and its ability to open up any vistas and windows of opportunity to the common man, it is still viewed as alien language and a symbol of slavery in many circles. English may also never flourish as a street language in this part of the world, given its innate differences with the languages of the region, and the fact that a certain degree of formal training may be required to master the language. Hindi, on the other hand has not only become a popular bazaar lingo throughout the sub-continent, aided in no small part to its similarity to Urdu, but a pidginized version of Hindi admixed with English has successfully established itself as an entry-level link languages in regions far-away from the Hindi heartland. While written usage of Hindi is dead outside the Hindi belt, it has come to be viewed a superficial cultural symbol of unity across swathes of India. Thus, Hindi and English are seen as mutually complementary. While Hindi has undoubtedly stepped in to fill a void, Hindi cannot replace English in India under ordinary circumstances, and attempting to change the dynamics of language spread using political methods or trying to force English out of the equation can prove disastrous for India's national unity. While English was undoubtedly brought from outside India in colonial times, few will deny the fact that it has never been imposed on anybody in post-independent times, and may have partly spread as a reaction to India's anachronistic Rajbhasha policy, which envisaged a different role for Hindi than the one it inevitably came to play. Thus, it is also important to understand the different roles played by different languages in polyglot societies.

Thus, in this case, Hindi has undoubtedly played a role in national integration, and has become a superficial symbol of national integration or a pan-Indian ethos, given the inability of English to function to this effect, and in ways that would not have been envisaged or understood at the time of India's independence, and this despite its undoubted failure and a quiet death as a Rajbhasha. It may have also provided a much-needed feel-good factor to create a psychological feeling of unity in India's early years of independence, and at a time when few politician were willing or able to see 'unity in diversity' as a tool of national integration, and at a time when India was in no position to adopt a position of enforced multi-linguicism or be seen as a nation of linguistic states. A question should also arise in the minds of most individuals of the role played by the government in this regard. While the three-language formula that was adopted by most states except the likes of Tamil Nadu and West Bengal was a vehicle atop which Hindi undoubtedly spread and allowed itself to be propagated, other factors such as the spread of Bollywood and internal migrations within India may have played a much greater role in promoting the language and connecting it with the masses than the Central

government's efforts to develop a technical vocabulary in the language to comic and ludicrous effect, or its usage in other arcane Rajbhasha contexts. Much more interestingly, the spread of a certain kind of pidgin Hindi or Hinglish after the introduction of economic reforms in 1991, as an entry level link language, is more of a manifestation of its suitability in this regard, and the popularity of this language increased manifold after liberalization even as its swansong as a Rajbhasha was being sung. Therefore, costly Rajbhasha policies actually failed, and the role played by Hindi as a lingua franca in modern India is completely different from the role envisaged for Hindi at the time of independence. Thus the Rajbhasha policy per se has become highly anachronistic; not only are funds allotted for the development of Indian languages skewed, the Central Government has failed to make use of new technologies such as the internet to promote knowledge in any Indian language or languages to the masses, allowing even multinational companies to leap-frog it in this respect.

In recent years, private sector companies have clearly shown that they cannot support the language of a community in a multi-lingual country. Private sector companies opt for neutral languages like English, or always and without exception, start their services in multiple Indian languages simultaneously.

However, spreading the language of one region through artificial means may be a very dangerous long-term strategy. It can perhaps even promote fanaticism and hatred in the long run, by allowing the people of a particular region to think themselves as superior to others. Hindi may have even spread because of the assured presence of English as a buffer, vindicating our stand that the two are mutually complementary.

Hence, after providing a superficial level of unity just enough to compensate for the weaknesses of English as a link language, the language of one particular community may actually begin to divide beyond a certain point, and, as a result, encourage English even more. Hindi may not provide a win-win proposition at any other level, either. Hence as a written language, or as a language used exclusively in formal communication, it is well and truly defunct outside the Hindi belt.

It may be extremely dangerous and suicidal to attempt to revive it through artificial means, and such efforts would only be synonymous with words such as enforcement and imposition, terms not associated even with the spread of English in India, either during the British Raj or after.

India's policies may have had other anomalies. While India was in most cases genuinely secular, it may not have been able to create a framework which created a mutual respect for other people's languages in India, throwing up other counter-reactions as a result.

Such policies may have thrown up other interesting results. This is a policy, which encourages Mumbaikars to speak in Hindi and write in English, but not the other way round, even in their own state, for example, although their mother tongue is Marathi. One is reminded of an interesting advertisement for entry-level staff in a bank in Mumbai where a pre-requisite for employment was the ability to speak in Hindi and write in English but not the other way around.

A policy, which, despite the inevitable spread of Hindi outside its heartland may have ensured that some educated South Indians did not speak to educated North Indians in Hindi to protest against discrimination and show that they respect their minority rights, but later encouraged them to use it sparingly and in informal situations once they realized that Hindi was losing the battle. Speak in Hindi and they reply back in English. Keep speaking in English and they may speak in Hindi, but only very sparingly, if they know it, perhaps just to show that they have nothing against Hindi as a language.

The practicality and characteristics of a language, along with its suitability for a specific role can play a major role in determining the spread of languages, and this has allowed Hindi and English to play complementary roles since India's independence. English has therefore entrenched itself as the language of trade, commerce and business and a lingua franca of the elite in Modern India while Hindi has come to be viewed as a superficial symbol of India's unity and may have had merits as a short-term national integration tool. The practicality and characteristics of a language, along with other factors such as its prestige and the availability of alternatives, the role played or the importance of such a language outside the area in question can therefore, also have a bearing on the role played by a language as a lingua franca in a region, and such considerations have played a key role in India as well. English for example lacks the characteristics that would make it a representative symbol of Indian culture. However, it has a certain prestige to it, and any speaker of English would have no hesitation of demonstrating his knowledge of the language. This may also explain the quotidian use of a large number of English words in Indian languages despite the existence of perfectly suitable Indian alternatives. On the other hand, French is seen to be a far more complex language than English with a far more complex grammar, complex conjugations and tenses, absence of a neuter gender, dichotomy between spoken and written languages, the use of subjunctives, and mandatory elisions and diacritics. In India, French, like Portuguese, disappeared after French colonies won their independence and were merged into the Indian Union. The reasons for this would be not too far to seek: French colonies in India were small and far apart like French colonies in Asia, and did not have the benefit of being able to interact with each other. Readers may refer the section on linguistic osmosis in this regard. The availability of more practical alternatives like English proved to be the final nail in the coffin for French in India. One can research the reasons for the decline of Latin if he likes. An ancient script in the Middle East, the Cuneiform script was intentionally designed to be as complex as possible to preclude its usage outside a small group of elites and scribes. This undoubtedly pre-empted its demise. In the case of the European Union the usage of English is far greater than French, and English undoubtedly established itself as the EU's most important language far ahead of both French and German. In Scandinavian countries and Holland, for example, the use of English is well-entrenched, and is widely seen to be a second language. However, in the EU, the widespread usage of English does not appear to have been associated with the domination of one group, as the usage of English as a useful lingua franca has currency outside the EU as well. The political independence of constituent nations may have served to allay fears of the linguistic domination of one group. French has been far luckier in Africa, but much of its luck here can be said to be fortuitous. French colonies here are found closer together, with allows for trade and cultural contacts between those regions. In addition, a costly and a controversial Francophonie program run by France may have propped up the importance of the French language somewhat. The availability of a large number of native tongues within each of the Francophonie countries, besides the fact that most are not written languages have helped the cause of French in the region. The absence of any other lingua franca, the low levels of literacy (which may have actually been a blessing in disguise as it empowered a small group of elites), the absence of a political will to enforce major changes to the language policies have also undoubtedly helped the cause of French in the region, and the rapid population growth in the region is perhaps the only icing on the cake for a language that is seen to be steep and terminal decline around the globe. This has not prevented the pidginisation and creolisation of French into mutually unintelligible forms, even though a substantial proportion of the population of some Francophone countries claim a working knowledge of French, and this may be an interesting manifestation of policies involving the import of a language that may not be the best-suited for the region. In addition, the region has not been immune to wider global forces, and English is making slow inroads into the region as well. In Rwanda, English has almost replaced French. This has impacted neighbouring Burundi as well. Of late, countries such as Gabon, Morocco and Zaire have made progress in introducing English. In Algeria,

English is already beginning to take over from French. In former French colonies in Asia such as Vietnam, Laos, Cambodia and Lebanon, English is now much more popular than French, and readers may refer to the section on linguistic osmosis. English also may have made a greater progress in recent times than French in disassociating itself from perceived cultural and economic imperialism, and English is rarely seen as representative of a single culture or an economic driving force, and is much more poly-centric than French, despite sporadic protests from France and other countries about the growing domain and suzerainty of the English language.

By this reckoning, the Future of Hindi as an official language of the Central government of India does not appear to be very bright. However, it is likely to remain one of the more commonly spoken languages of the world, at least in terms of number of native speakers, and its influence overseas may continue to increase. Its role as an internal lingua franca in the subcontinent has strengthened, and its future in this regard, at least in the short term appears to be assured. Much will also depend on India's long-term language policy and the attitude of states; most now offer Hindi only as a third language and only a few want to scrap Hindi altogether. The role and importance of English not only in India, but also beyond will play a role here, and it would be ideal to wait patiently for clearly discernible trends to demonstrate themselves.

Many euro-centric researchers erroneously took European languages as a yardstick to judge the characteristics of languages and falsely assumed that languages such as Chinese which had a different grammatical structure were less developed than English. Likewise, scholars in Eighteenth Century France believed that other dialects and languages of France were inferior given the fact that Standard French was spoken only by a small minority at the time and was a symbol of Haute Couture and diplomacy. This is today referred to as Subjective Inequality. On the other hand English has developed fairly rapidly only in recent times, and may now have over 350,000 non-technical words, a much higher figure than even French. However, it would be fallacious to assume that this was always the case, and to superimpose a present-day trend over the whole of human history is to demonstrate a lack of knowledge of human history. Different trends have undoubtedly been observed over the ages, William Jones for example made a remarkable discovery when he discovered that Sanskrit was closely related to European languages, triggering off a series of reactions both in India and elsewhere in the world. He also heaped encomiums upon it, singing praises about its structure. This was a most remarkable find at that time, and most scholars now believe that the PIE, or the hypothetical ancestor of languages from English to Bengali (which as suggested in our papers may have been more than one language) was spoken in Central Asia in the steppes (Refer the Kurgan hypothesis which tallies with our theories to the T. On the other hand, The Anatolian model does not make sense from the point of view of India at all). Ideological perceptions on the role and importance of language likewise vary, more so in a complex nation such as India, and some Hindu nationalists not only insist on an indigenous 'Aryan' hypothesis but also locate an urheimat in India (sic!) postulating an outward expansion from there; some others claim that Sanskrit is the ancestor of every living language in the world. Dalit nationalists, on the other hand, take a radically different view, and consider it a language of interlopers.

In spite of the dogged persistence of varying viewpoints, there is undoubtedly a wide variation in the nature and state of development of languages, and their suitability for different roles, and a few languages may even have a less than a few thousand words each. Thus, some languages may have a rich repertoire in some fields, no virtually no vocabulary in others. This is known as 'Strictly linguistic inequality'. These aspects need to be assessed against the backdrop of a society's culture, and such factors would determine the role of a language in society. We may refer to this as 'Contextual suitability'. For example, a language like Mizo, though unequal with English in some respects, may have its own role to play in specific contexts, as it may be associated with self-identification and

identification by other cultural or linguistic groups. Likewise, Swahili symbolizes local ethnicity in East Africa, in a way English simply cannot. (Scotton: 1982) In India, for example, both the language policy and the attitudes of speakers are likewise conducive for bi-lingualism or multi-lingualism despite linguistic encroachment. In most societies, knowledge of the local language is a pre-requisite for low-level employment as there is too wide a distance between the masses and English. Thus, the 'Contextual suitability' may vary not only from region to region as this would depend on the aggregated preferences of the speakers of a language, but also based on the different roles (or the functions) a language may play in a given region or society. We may refer to this as 'Role-based suitability' or 'Function-based suitability'. The Contextual suitability of a language would be the aggregate of the suitability of the language for different roles. The suitability of a language for different roles would be an aggregate of all the principles in this paper which include speaker preferences, characteristics of a language, its relationship with a culture as well as availability of alternatives, and these would play a critical and a crucial role in determining the success of language policies. We may also propose the terms 'Contextual indispensability' and 'Role-based indispensability', and the indispensability of a language either in a geographical context or for a specific role, would depend on a comprehensive assessment of whether any other language can play that role or not. Thus, a dialect of Chenchu may disappear from Andhra Pradesh altogether, particularly, if it has too few speakers. They can also be used to predict the dynamics of language spread and the death and extinction of languages.

Another interesting fallout of this discussion is that artificial methods to insulate a language or drive the development of languages in a manner that would restrict their access, make them less user-friendly to target audiences or make them less suitable for various functions would naturally reduce their utility and lower their chances of success. Examples of such movements have been the ham-handed attempts to regulate the development of the French language through the 'Academie nationale de la langue francaise', the contrived development of the Hindi language in the early Post-Rajbhasha era and the Thani Tamil Iyakkam or the Pure Tamil Movement of Tamil Nadu. All three have ended in failure, and the success of English despite the absence of a governing body of any kind should be an eye-opener. English, unlike French, has also been more flexible in borrowing new words from other languages, and this may have played a role in its success.

The ready availability of alternatives would also play a role in determining the success of a link language, and if better alternatives are readily available in a region, can be put to use within a generation. Thus, one may argue that English may vie with French in Francophonie West Africa as a lingua franca of elites within just a few generations from now. Sanskrit, if used as a replacement for Hindi as a link language for India, may not entirely succeed as discussed in an earlier paper, not only because of its characteristics, and its likely unsuitability as a daily language of mass communication, and opposition in some circles, but also because it has to reckon with English's power not only within but also outside India. Attempts to resurrect languages from the dead have met with partial or limited success at best, and one may refer to the example of Hebrew. Therefore any Hindi vs Sanskrit debate would be far from simple, and one of the Prakrits would theoretically stand on a marginally better footing than Sanskrit. As an example, it must be noted that Urdu has failed to displace English in post-partitioned Pakistan, and this is chiefly due to the latter's importance outside that country. The only option in such a case, would be perhaps, to make these languages suitable for daily discourse, introduce them as optional subjects, and then wait for the dynamics of language spread to take hold. This will of course take time given the current power and prestige of English, and it is highly unlikely that such shifts will even be remotely perceptible within most of our lifetimes. One is reminded of the following controversial quote of a former editor of The Oxford English Dictionary. While this statement has a highly patronizing and an arrogant tone, it is interesting because many individuals in Non-English

speaking countries could relate to it “English has also become a lingua franca to the point that any literate educated person is in a very real sense deprived if he does not know English. Poverty, famine and disease are instantly recognized as the cruellest and least excusable forms of deprivation. Linguistic deprivation is a less easily noticed condition, but one nevertheless of great significance.” (Burchfield 1985:160). However, such statement cannot camouflage the fact that the spread of English, although seminal and thus far without parallel in the whole of human history, has been far from uniform across geographical regions, and much less so as a widely spoken language and there still are some global contexts in which a knowledge of English is not required.

4. Enforced multi-linguicism as a strategy for national integration

It may be emphasized that enforced multi-linguicism is a very reliable and attractive alternative national integration strategy, and is one that is likely to work in a wide variety of scenarios. Many countries such as Canada and Switzerland have adopted such strategies successfully. Some other countries have also granted national recognition to two or more languages, examples of these being Belgium, Finland, Ireland, Luxembourg and Malta. Some other European countries have also recognized some minority languages at the regional or a municipal level, examples being Austria, Bulgaria, Croatia, Cyprus, Germany, Hungary, Italy, Lithuania, the Netherlands, Slovakia, Slovenia, Spain, and the United Kingdom. France, however, has a long tradition of not recognizing minority languages. In a multilingual country like Singapore, many people can speak more than one language. Singapore has four official languages: English, the Mandarin variety of Chinese, Tamil, and Malay, the last of which is also the national language. However, the majority of its population are native speakers of a dialect of Chinese. Singapore’s national language policy promotes English as the mainstream international language, and the preferred language of trade and commerce, Mandarin as the international ‘Chinese’ language, Malay as the ‘National language’, and Tamil as the language of one of the four ethnic groups in the country.

As a matter of fact, the failure rate associated with such policies may be low, if properly conceptualized and implemented as they are likely to meet with much less opposition. However, such policies may entail high communication overheads and high cost of implementation, and may not be ideal for all societies with a great degree of linguistic diversity. To avoid the pitfalls of such approaches, via media solutions can be cleverly adopted. An example for a country like India is a three language-formula where the language of the state, English, and any one third language listed in Schedule Eight of the Indian Constitution can be learnt by the student in lieu of a mandatory study of Hindi.

5. The role played by Political factors in influencing the dynamics of language spread in multi-lingual societies

We can see from the earlier examples in this paper that political factors can play a role in altering the dynamics of language spread but they can never work against the basic principles of language spread in multilingual societies, and will at best meet with limited success. If examined more critically, these approaches will only work to the extent they fulfil some other principle. For example, both Persian and English were brought to India from outside as also was some ancestor of Vedic Sanskrit known as the PIE or one of the constituents of the PIE in much more ancient times, but they all stepped in to fill linguistic voids in their respective times only. We may also note that the language of a region or a lingua franca cannot replace the language of another region in a multilingual society under ordinary circumstances. However, the language of a region can dominate the language of another region in a multilingual society under specific circumstances (see section on the Theory of win-win propositions). If changes are wrought using artificial methods and in a manner that defeat other well-defined principles, it is bound to throw up counter-reactions. Thus, costly Rajabhasha policies have not only

failed, but may have even encouraged English even more. This should be a salutary lesson to most that sophistry and polemics cannot substitute well-established principles of language spread. One successful example of a politically-driven change in recent times has however, been the shift in Rwanda from French to English, and the main driver of this change was France's role in the Rwandan genocide. However, the practicality and the importance of English at a global level were other reasons given for the change, apart from the fact that both French and English being both alien languages in the nation were to play the same role.

6. Spread of languages through political force vs 'market' demand and 'force of argument'

While English was undoubtedly spread by force in colonial times, the USA has both directly and indirectly played a much greater role in the spread of English since the dawn of the Twentieth century than Britain, and the United States has played a much greater role in shaping the forces of globalization as well. Contemporary arguments in favour of English are mostly driven by the state of the market for English and Force of argument i.e. rational analysis in the light of available information. Thus, a huge demand has been created in the recent past for the learning of English in places as far apart as Senegal and Papua New Guinea, and the worldwide demand for English learning has even begun to play a not-so-insignificant role in Britain's economy. As a director of a chain of international schools put it, "Once we used to send gunboats and diplomats abroad. Now we are sending English language teachers." (International House Brochure, 1979). Thus, the spread of English in recent times has been far more effective and deep-rooted than the spread of French, and has been brought about more through 'pull factors' than 'push factors'. The French, on the other hand, have made earnest attempts to promote their language across the globe, and in their ex-colonies in particular, known as the Francophonie, but with a much lower degree of success.

The learning of Hindi in Tamil Nadu has paradoxically picked up greatly after liberalization although pundits sounded the death-knell for the language in the state, and the kind of belligerent animosity that prevailed towards the language is now passe. Many parents in the state now want their children to possess at least a working knowledge of the language. However, as a written language, or as a language of formal communication, Hindi is well and truly dead outside the Hindi heartland. It may even be dangerous to revive it using artificial methods, and this would associate it with terms such as "imposition", "enforcement" etc. which were not even associated with the spread of English during the British Raj.

One view states "Hindi unites, English divides". Yet another diametrically opposite view is "English unites, Hindi divides". The former's value proposition is that Hindi is an Indian language, the latter's, that English is neutral and does not discriminate on the basis of ethnicity. Upon superficial examination, the first would appear to be true, and this statement works much better with popular rhetoric as well; with hindsight both statements are probably true and untrue at the same time, as both languages have come to don different hats in post-independent and post-globalized India.

Thus, both the popularity of English and Hindi in India were brought about by different political agents; now the question is whether the other bonafide and universal principles of language spread will be sub dominated to the popularity and usage of these languages. The answer to this question should be a resounding no.

7. Internal migrations can play a role in shaping the dynamics of language spread in multi-lingual societies

Human migrations can play a role in shaping the dynamics of language spread, and in many cases new languages were brought to a region by aliens such as the Introduction of European languages to North

and South America and Asia, and the introduction of some ancestor of Vedic Sanskrit into India in much more ancient times. However, the spread of such languages into a region without accompanying human migrations may be rarer. However, such scenarios have been proven possible in the recent past due to the rapid spread of science and technology, the spread of English across the globe being a case in point. Likewise, intra-region migrations in a multi-lingual country can also facilitate the spread of languages, but this would be subject to the other principles laid out in this paper. In many cases, immigrants may retain their languages several generations after migrating to a new region. In some other cases, they may lose their identity much more quickly. Several factors may determine this including loyalty to the native language, economic strata, the relative importance of a given set of languages etc. Tamils, and others are undoubtedly worried that the spread of Hindi may lead to cultural homogenization at a certain level, obviating the need for outsiders to learn the local language, and thereby assimilate themselves into the local population. We may also note here that the language of a region can then dominate the language of another region, but the complete annihilation of a language can only happen under extremely rare circumstances and perhaps over a protracted span of time.

8. The Theory of Win-win propositions and exceptions to the Theory of Win-win propositions

The Theory of Win-win propositions as opposed to the principle of Unnatural Control states that within a given set of circumstances, languages spread in such a way that they provide as far as possible, a win-win proposition to all stakeholders, and any paradigm which results in a win-lose proposition would either fail or throw up a counter-reaction. An example to this in the Rajabhasha policy which would have led to a win-lose proposition, by benefitting only the speakers of one language. In the case, they were many inconsistencies in policy between central and state governments as well. The policy not only failed but also encouraged English even more, by making Hindi and other Indian languages subservient to English. English also may be based on a win-lose paradigm as it may benefit a small number of speakers fluent in English at the expense of the disempowered majority. This may automatically restrict the use of English to specific contexts and encourage another language or set of languages in other contexts. Here is another example: Hindi has spread in recent years outside the Hindi speaking states. There may be many reasons for this. One is the three language formula followed in most of India; this policy familiarized a large number of Indians with the Hindi language and provided them with a working knowledge of Hindi. The second is the rise of Bollywood which rode piggy-back on India's language policy. The third may be the spread of Hindi-speakers outside non-Hindi states in pursuit of job opportunities. Thus, Hindi has begun to be used even by groups of non-Hindi speakers, none of whose native language is Hindi to communicate with each other in specific contexts. Thus a Telugu speaker in Bangalore who does not know Kannada and is indisposed to learning the local language and is not fluent in English, may speak to a Marathi speaker in Bangalore in Hindi. This is because the usage of Hindi at this level provides a win-win proposition to both the parties. Hence, after providing a modicum of unity to compensate for the impracticality of English in specific contexts, Hindi may actually divide beyond a point, and, obviously encourage English even more. Hindi may not provide a win-win proposition at any other level, either. Hence, as explained, as a written language, or as a language used exclusively in formal communication, it is well and truly defunct outside the Hindi belt. As a fallout of this paradigm, both the parties mentioned above may lose interest in Hindi altogether after acquiring fluency in English, and their increased fluency in English would curtail their usage of Hindi. On the other hand, Hindi speakers may have had a false sense of complacency, a kind of wishful thinking that did not ultimately work in their interests, and resultantly, economies of Non-Hindi states were poised for take-off in the early years of liberalization, in spite of the limited English proficiency of the larger populations of Non-Hindi states. A parity across various states in the nation is of course being achieved now. This is a key principle that needs to be borne in

mind by while formulating language policies, and any violation of this principle may work against communal harmony. There may be exceptions to this rule- examples are the spread of Kannada in non-Kannada speaking areas of Karnataka (This may have happened because Kannada was the language through which widespread literacy was achieved throughout Karnataka and the other languages in the state were only spoken ones lacking written records or a literary tradition.) and the spread of English in non-English speaking areas of Britain. In both cases, the status quo may have been achieved only after centuries, and other languages did not die out completely. In case of the latter, the spread of English into parts of Britain may have been effected by that language's prestige as an international lingua franca as well. The relative decline of French and the spread of English does not provide a win-win proposition to French speakers; however, there is an inevitability to this, and the enforcement of such a scenario through political methods for example, would not have worked.

The Theory of Win-win proposition may have worked in colonial times as well. English was seen as a tool for empowerment by Indian clerks in the East India Company and other Indians who wanted favours from the British. This principle undoubtedly applied in other English and French colonies also, and the colonized elites were treated to a carrot-and-stick approach. Another strategy adopted by imperial rulers, among others, was to divide Indian elites from non-elites for whom language policy may have mattered little. Thus, it would be very obvious from the very outset, that Imperial language policies involved a fair amount of successful strategizing. Even the Indus Valley Civilization elites showed a tacit respect for the principles of 'Unity in Diversity' or at least the principles that would have fostered communal harmony in a multi-ethnic and polyglot society. A similar situation may have prevailed in Post-Harappan India, where the Prakrits though restricted in certain spheres, flourished as spoken languages of the masses. This observation also caused us to replace the 'Elite dominance model' explaining the transformation of the languages of Harappan India to the languages of Post-Harappan India to a 'Roller-ball' model. The notion of proto-languages is another popular myth, and in most cases, should be falsified. The PIE, if at all it was a single language was an influencing language and not a proto-language. The notion of a Proto-Dravidian language was likewise possibly a myth. A thorough re-examination of terms such as Proto-Slavic, Proto-Ugaritic, Proto-Romance and Proto-Semitic might likewise be warranted. We will look forward to a critical re-examination of archaic concepts in times to come. Post-Independent India's language policy may have emphasized religious harmony over harmony among speakers of various languages to prevent an impending partition of the nation, but this policy was clearly hijacked by people with vested interests as well, who may not even have had the larger interests of the nation in mind. Win-win propositions must again be *intrinsic* or built into the structure of the proposal itself, as opposed to *non-intrinsic*. Thus bargains involving reservations for non-Hindi speakers would not have worked as this would not addressed a wide variety of scenarios. While Karl Marx may not have spoken about such linguistic paradigms, they were clearly Soviet-style communist constructs and antithetical to the very idea of India. One can even provocatively argue that our ancient ancestors were endowed with more practical common sense and that the failed Rajbhasha policy, despite the success of Hindi in other spheres, was a blot on the idea of India.

The doctrine of insubordination comes into play when the speakers of a language or a group of languages accept the supremacy of another language in spite of a historical track record of opposition to it. This may be a bona fide exception to the Theory of Win-win propositions. While such an equation may rarely lead to the extermination of the oppressed language group, the speakers of the oppressed language group accept the inevitable and may grudgingly accept the supremacy of the other language either on the basis on the numerical strength of its users, its widespread usage, or its cultural or technical superiority. This however works only in conjunction with other principles of language spread in multi-lingual societies. Examples of such cases include the slow acceptance of English in many circles

in France as the world's leading lingua franca. The recent desire expressed by many Tamil speakers to acquire at least a basic level of proficiency in Hindi, in addition to Tamil and English is another case in point. In case of the latter, English is however a neutralizing factor, as the extent of linguistic domination by one group in a single country or a political entity may be far more severe as it is at a global level as there may be fewer checks and balances here. We may invoke the 'Theory of Linguistic Osmosis here'. Even so, most French speakers may have climbed on to the English Bandwagon for self-benefit, or to make the best use of a situation in which they have relatively less leeway, and English is increasingly seen in France as an indispensable tool of internationalization. Tamil speakers, likewise may learn Hindi for the limited purpose of entry-level inter-state communication and for the very limited purpose of Central Government jobs. Likewise, although Hindi has lost the race to English, Hindi speakers are not on uneven keel with other language speakers for jobs, and English has greatly benefitted Hindi elites too. Thus, the complete subjugation of one linguistic group by the other may be extremely rare, at least where a change in status quo is involved, and a time-consuming process as all parties always try to make best use of any given situation. For such a language policy to work the language in question or its speakers must possess an enormous amount of clout of goodwill, and no other roadblocks or impediments must exist. As such, such cases are relatively rare in the real world, and this explains why Hindi failed to replace English. As a matter of fact, few scholars ever expected it would. There may be a few exceptions here, such as the co-existence and linguistic subordination of Tulu and Konkani speakers in Karnataka, the reasons for which have been laid bare in this paper, but this paper proposes a principle and recommends that exceptions be studied separately, as such an approach would always put an onus on those providing differing viewpoints to provide empirical evidence and a logical justification. As Horton and Hunt have pointed out, assimilation and acculturation are always two-way processes involving some amount of give-and-take, and exceptions to this principle may be relatively rare. However, the Doctrine of Insubordination does imply that the subordinating language is not on even keel with the subordinated languages, and as such it may take a greater effort to break its stranglehold. Thus, the doctrine of Insubordination does imply a change in the language hierarchy.

In spite of the so-called neutrality of the English language from the standpoint of various Indian linguistic groups, the language is heavily biased in favour of English speaking countries, and gives them a clear advantage in fields such as science and technology, for example. Secondly, the English language is at best known to small groups of people outside native English speaking countries, and is heavily biased in favour of urban and educated elites in all parts of India. Thirdly, native English speakers get away by leaning English alone which is their native language and rarely learn any other language. However, English learners in Non-English speaking countries must not only learn English as a foreign language, but must also learn one or two additional language as well. Fourthly, it is doubtful if the elites in Non-English speaking countries can achieve the same level of proficiency in English as native English speakers. In spite of all these factors and the fact that English is known only to a small number of people in India when compared to Hindi, the forces of language spread in the region have booted out Hindi in favour of English, despite the latter's lack of political patronage at any level, allowing Hindi only to play second fiddle to it. The forces of language spread in the region clearly took precedence over the forces of language spread at an international level here. Again the principles of the Theory of Linguistic Osmosis manifested themselves.

9. Cultural hegemony as a tool of Language spread

Popular surveys have revealed that English is associated with Science, Technology, the Internet, modernization and social mobility. On the other hand it is also associated with Imperialism, materialism, Westernization, anti-nationalism and cultural alienation and rarely with national identity.

Such associations play a major role in determining the role played by languages, and this cannot be more true in multi-lingual, multi-ethnic societies where different languages may have different roles to play. For example, Hindi may have become a superficial symbol of India's cultural unity, but may never entirely displace other Indian languages in this regard, as linguistic affiliation continues to be very strong in most parts of India. As Annamalai explains,

The English language is accepted in practice as the cultural language for the modern values and aspirations, but is rejected in policy as the language of cultural domination and distortion. Given the market forces, the fear is that the policy of unequal bilingualism with Indian languages being poor cousins... its (that of English) current position was unplanned by the policy makers. (Annamalai 1988: 14-15)

Thus, while Cultural hegemony is undoubtedly a tool of language spread, it has its own limitations and may never be able to take over or replace all functions of a language easily. Also, no over-generalizations are possible in this regard and a case to case examination would be in order; languages may spread without any perceptions of cultural hegemony, and we can cite the purely functional usage of English in the Middle East as an example. A language may be seen as symbolic of only some positive values in a society, and may have virtually no role to play in nurturing or reinforcing other positive values in the same society or worse still may be successful despite being seen as symbolic of many negative cultural traits; a language may spread despite the absence of any reference points pertaining to culture, or in some cases, different languages may symbolize different values and aspirations, as was amply borne out in the case of India.

10. The Theory of Linguistic Osmosis

Another key aspect to be borne in mind is that of linguistic unit or entity. Linguistic units or entities can be at various levels; The lowest level here is the linguistic community, which may have one or more subsets and is defined by Charles Hockett (1958:8) as " Each language defines a speech community: the whole set of people who communicate with each other, either directly or indirectly, via the common language." Or alternatively by William Labov "The speech community is not defined by any marked agreement in the use of language elements, so much as by participation in a set of shared norms; these norms may be observed in overt types of evaluative behaviour, and by the uniformity of abstract patterns of variation which are invariant in respect to a particular level of usage." (1972: pp 120-21) However, it is common in reality of practice, for most linguistic communities to have several linguistic minorities in addition to a majority or a dominant group. Linguistic communities may also be characterized by the presence of a large number of dialects.

The next level may be a linguistic block, which may also be referred to as a linguistic zone or a linguistic area, which comprises of various linguistic communities which share common linguistic or cultural traits, or may comprise of a geographical zone where dynamics of language are similar to one another, closely influence each other, or are driven by the same factors. A linguistic block may not comprise of a region comprising speakers of the same language or the same group of language. A linguistic block may or may not equate with a 'Political or Economic entity', (both terms have different meanings) which is another definition for our purpose, and may or may not overlap with them. In case they are synonymous with one another, the dynamics or language spread within the linguistic area are also determined by political or economic factors brought into effect by such a political or economic entity. In case, the linguistic area does not correspond to a political or an economic entity, such political and economic entities will still need to be identified and defined, and their relationship with the linguistic area and the resultant bearing they have on the dynamics of language spread of each other

understood. Therefore it is of utmost importance to get the concept of a linguistic block correctly, and some examples are provided in this paper.

We may note that the dynamics of language spread outside the linguistic community or a linguistic block can have a bearing on the dynamics of language spread within the linguistic community or the linguistic block. Similarly the dynamics of language spread within the linguistic community or the linguistic block can have a bearing on the dynamics of language spread outside the linguistic community or the linguistic block. However, the Theory of Linguistic Osmosis applies. Thus, the internal dynamics will always take precedence in determining the spread of languages within the linguistic community or block, the linguistic community or the block will always be a tighter linguistic unit. There may be exceptions such as the influence of ubiquitous pan-regional or global trends, but these must always be studied separately.

For example Hindi may not spread easily outside India given the resistance within India to the spread of Hindi overseas using political methods as a tactic to modify or alter the dynamics of language spread in India by political or artificial methods. Even if it does spread over a protracted time span, it may have difficulty replacing other languages in India even after it has supplanted or subordinated other languages in select regions outside the country such as Suriname or Fiji except if it happens in conjunction with several other factors over which we presently have no knowledge or control. An example of this is the spread of English outside England over the past few centuries. However, the spread of the English language outside England has not been able to exterminate the dialects of English in England or other languages, or destroy other languages like Welsh completely. These have revived through the principle of ethno genesis. Thus, regions may be approached distinctly for the purposes of such studies, and may be further broken down as required. Thus, the dynamics of language spread internal to Switzerland and its multi-lingual nature has helped popularize English in the country. Durmuller, for example, has investigated through questionnaires and interviews, the internal usage of English in Switzerland, which entrenched itself in that country fairly recently and speakers' attitudes towards it (Durmuller: 1984). He observed that the Swiss preferred English next only to their native languages and over their other national languages. The dynamics of language in Switzerland are in turn impacted by the dynamics of language spread in Europe after the emergence of the European Union, leading to the rise of English across the continent and the decline of French in the continent, largely independent perhaps of trends in England itself. Likewise, the popularity of English in Switzerland and in Scandinavian countries would help bolster its popularity across Europe. The popularity of English in Europe would also be impacted by and would in turn impact the spread of English around the globe, and perhaps trigger a decline in the importance French as well, both in Europe, and beyond and at least in the longer-term. On the other hand, if the power of French in Francophonie Africa is to be challenged, a concerted and a well-orchestrated effort involving multiple nations is required, as this is a Political or Economic entity for our purpose. The political inertia in the region may not lend itself very easily to change either, and the region may prove to be immune to global trends at least in the short-term. Another noteworthy example in this regard is the very rapid spread of Sanskrit in Post-Harappan India from the Gangetic plains to the north-west of India as a lingua franca even though political unity across the region was non-existent, the only common cultural threads being what one may refer to as over-riding elements of 'Aryan' culture. This, in due course, effected the popularization of Sanskrit as a cultural symbol of the region, and greatly enhanced its prestige. This in turn played a role as its eventual importance as a cultural and religious symbol of much of Ancient India, and later led to an interest in the language and its study worldwide.

The concepts in this paper are only illustrative and we define only two levels (a) The linguistic community and (b) The linguistic block. We also define the term 'Political or Economic entity.' The other levels must be defined on a case to case basis as explained.

Therefore, we may lay down the following broad rules:

1. A linguistic community or a sub-unit or a linguistic community is always the tightest linguistic unit.
2. A linguistic community or a sub-unit or a linguistic community normally sets the patterns for itself, and the spread of languages within the linguistic community would be dictated by the dynamics of language spread within the linguistic community. This is because forces operating within this level are much stronger than, and therefore take precedence over other factors.
3. The dynamics of language spread within a linguistic community can also be influenced by external factors.
4. A linguistic community can influence the dynamics of language spread in neighbouring linguistic communities, or in a wider region. However, dynamics of language spread in other regions would be also determined by other internal and external forces.
5. The dynamics of language spread within the linguistic community normally play a greater role in determining outcomes within the community, than external factors. There may be exceptions, and these need to be evaluated on a case to case basis and justified.
6. The spread of languages within a linguistic block would primarily be dependent on the dynamics of language spread within the block. However, the dynamics of language spread of the constituent linguistic communities would also play a role.
7. The spread of languages within a linguistic block can also impact and be impacted by the dynamics of language spread at the next level which can be user-defined, as the concepts in this paper are only illustrative. For example, while English may have once been a Hobson's choice in India, its domestic strength largely grew as a result of its international strength.
8. In order to understand how the dynamics of language spread in linguistic block affect the dynamics of language spread within the political or economic entity, the patterns of intersection between the linguistic block and the political or economic entity need to be understood. There may be many possible patterns of intersection between the two. In scenario A, the two may be synonymous. In scenario B, a linguistic block may be a subset of a political or economic entity, and the political or economic entity may have only one linguistic block. In scenario C, a linguistic block may be a subset of a political or an economic entity, and the political or economic entity may have more than one linguistic blocks. In scenario D, the linguistic block may lie partly within the political or economic entity and partly outside it.
9. Thus the workings of the political or economic entity will come to bear on the dynamics of language spread in the constituent linguistic blocks and vice versa. If the linguistic block partly lies outside the political or economic entity, it needs to be logically split into two.
10. As the levels proposed here are purely indicative, the researcher is well-advised to prepare a schema before he begins.
11. An analysis should ideally commence at the level of a linguistic community, and should be ideally aggregated by geographical region.
12. This exercise must always be carried out in conjunction with a context-based analysis and a role or a function-based analysis (See section on Contextual Suitability and Role-based suitability and Function-based suitability in this paper) to understand the forces of language spread more accurately.

13. This exercise may also be carried out in conjunction with the other principles in the paper such as the Theory of win-win propositions, and an exercise in this section explains how this can be done to greater effect.
14. The key to getting this approach correct would be to define Linguistic Communities, Linguistic blocks, Political and Economic entities and other levels correctly. For example, if India is chosen as the focus area of study, a linguistic state would ideally be a linguistic community. In some cases like Karnataka, the state can be split up into two levels. However, a region comprising Karnataka and Andhra Pradesh or Gujarat and Rajasthan, or even the whole of South India (despite the fact that they speak languages belonging to a unique language group) can never be a linguistic block as such a region can produce no unique dynamics and would be irrelevant for the purposes of such studies. Likewise such a region, or even an Indian state, except in rare circumstances in case of the latter, cannot be chosen as a Political or Economic entity either as such a region or a state does not qualify to be a political or an economic unit of any kind.

Another interesting picture emerges from the study of Bangladesh which attained independence in 1971 from Pakistan, when then comprised of two wings, West Pakistan and East Pakistan, separated by Indian territory. Urdu was chosen as a link language in Pakistan as it was neutral to all language speakers and was the mother tongue of a very small group of people. Moreover, it was seen as a cultural symbol of Pakistan and Islam. Though this policy appears to have worked well in West Pakistan, where Sindhi, Punjabi, Baluchi and Pashto were widely spoken, the “imposition” of Urdu was not well-received in East Pakistan or Bangladesh, despite the language’s neutrality to all the provinces of Pakistan, East Pakistan included. Thus, not only linguistic pride, but geographical distance, and a feeling of cultural separation played a role here, as globalization in its present-form was unknown then. The Theory of Linguistic Osmosis may apply here, as East Pakistan was a separate linguistic community within a combined Pakistan for our purpose. This approach can be put to practical use in a wide variety of situations, and can be a great boon and can be used to predict language trends in specific regions or across the world, including spread or decline of languages. Readers can also evaluate for themselves to what extent the Indian Government’s attempts to spread Hindi outside India, and at an international level, would succeed in altering the dynamics of language spread outside and within India, given that Hindi is hardly spoken in a handful of countries outside India. The spread of English happened because it satisfied the principles laid down in this paper, and English Language Teaching programs have succeeded in the recent past because of the underlying demand for such programs, and the large gap between demand and supply. On the contrary, even costly Francophonie programs may at best consolidate the position of the French language in the short to the medium term, and may not prevent its long-term decline. On the other hand there is no huge demand-supply gap for the learning of Hindi outside India, and it may be wrong to promote the language of one region to the exclusion of all other Indian languages in a federal set-up like India, or even to mislead foreigners about the linguistic scenario in India. Such efforts would be ill-conceived in a post-globalized context. Per the principles of this paper, and to put it extremely crudely, such endeavours would be tantamount to throwing money out of the window. Instead, the same money can be used to increase literacy levels or improve the standard of education across all regions of India. Alternatively, all Indian languages can be promoted outside India, given the increased interest in India across the world in recent times, and the Indian government can play a key role in ensuring that awareness is created for the learning of Indian languages outside India, and that key institutes and universities are roped in for the purpose. In the second case, the Return on Investment for the Central Government would be much, much higher.

11. Notes on the birth and death of languages in multi-lingual countries

Most linguists think that spoken languages evolved between 50,000 years and 100,000 years ago. However, written languages are much less ancient. The earliest 'symbol systems' appeared some seven thousand years ago, and true logo-syllabic scripts appeared some five thousand years ago. Alphabets, on the other hand, were not invented until around 2000 BC, and the first full-fledged alphabetic system anywhere in the world is believed to have been Proto-Sinaitic. Languages can take birth due to a wide variety of factors. The birth of a new language is usually a slow process that may span several centuries. Factors leading to birth of new languages are many and could include cultural or linguistic ethno genesis manifested by a linguistic group and the desire to emphasize a differentiation from another group, geographical factors such as the movement of speakers of a language from one region to another region, Political factors such as the creation of a new political entity which may lead to the crystallization of a continuum of dialects or a dialect chain into a formal language within the confines of that political entity, and over a period in time. This paper postulates that these are the three most common forces leading to the birth of languages. Out of these, and in what appears to be contrary to popular thought, this paper postulates that migrations may have been relatively less common in ancient or pre-historic times, as humans would not normally have migrated without substantive reason, and more so, in the absence of any accompanying wherewithal. In case of 'Aryan' migrations to India, or migrations into Sri Lanka, they can be easily inferred, and may therefore be true, despite the fact that they clearly involved a small number of people. The onus may therefore, rest on those who propose migrations in varying contexts to present direct or indirect evidence in support of their stand. However, as opposed to this, we support the idea that humans and languages were continuously in contact with one another, and much more than may have been previously assumed. Therefore, the linguistic situation in the Neolithic era, or earlier, was that there were probably a very large number of dialects in relation to the total global population with a relatively small number of isoglosses. These isoglosses, must always merit a thorough and a case to case examination and they would be, from our perspective, another linguistic jackpot. The birth of American English as a distinct form of English over the past few centuries and the emergence of a more globalised English in the past few decades are examples of linguistic change driven by such factors. There may always be interesting and unique exceptions such as the Hindi-Urdu paradigm which is referred to by some linguists as a poly-centric language. "Localization", or transformation of wider cultures into something new is also an accepted and a well-studied paradigm in Cultural Anthropology. Some scholars also think that languages 'can break up in due course to form new languages', and such 'explanations' can be found in many papers, but this is more of a generic observation than an explanation, and it would be recommended to provide more detailed explanations in each case by carrying out a root cause analysis. Earlier explanations on the birth of Indo-Aryan languages in India, and scholars may read our papers on the Aryan problem in this regard. In South India, Telugu is primarily spoken in the state of Andhra Pradesh which comprises of three distinct cultural and geographical regions, Coastal Andhra, Rayalaseema and Telengana where different dialects of the same language are spoken. Speakers of one the three regions namely Telengana, have been agitating for a separate state within the framework of the Indian union since 1970. The new state was formed in 2014. This is an ideal ground for the study of the emergence of changes to language wrought by political factors, and although the region already speaks a distinct dialect in Telugu, it will be interesting to see how further changes manifest themselves in coming decades.¹⁸

The Birth of languages under unusual circumstances has been observed from our study of the transformation of Harappan India to Post-Harappan India where the transfer of populations to the

¹⁸ Language and linguistics An introduction John Lyons Cambridge University Press 2014

Ganga-Yamuna doab in 1900 BC may have led to the birth of new languages in the Gangetic plains, and in this case, the many languages of the IVC may have fused to form a smaller number of Prakrits, which then began to evolve distinctly in different geographical regions of the Gangetic plains. Diaglossia or variation between spoken and written forms of a language, and pidginisation or creolisation are also processes through which new forms of languages can develop. The Wave Theory, along with all its variations, is the most common theory that explains the process of language change and its spread to outlying areas, and is widely accepted by most scholars. This theory was first proposed by Johannes Schmidt in the year 1872.

Languages can likewise spread due to many reasons, and according to Lewis, factors involved in language spread can be grouped into four sets. (1982:215)

1. Language attitudes, for instance the strength of efforts to maintain a threatened language or to restrict the functions of an indigenous language;
2. The nature of the between-group interaction, e.g., geographical continuity, ease of communication, conquest, colonization, the nature of the relationship between the colonizing centre and the periphery.
3. Modernization, including the intensity of economic development, the degree of external exploitation of indigenous resources, urbanization, demographic features such as the degree of education of mobile and stable groups;
4. The political theories and religious and cultural characteristics associated with a language, especially the distance between the spreading language, and the level of inequality between the spreading language, and other language in contact with it with respect to those theories and characteristics;

These factors can interact with one another in myriad ways to determine outcomes. Therefore a linguistic inequality favouring English may over-ride linguistic loyalties of Non-English speakers.

Languages on the other hand, can die out due to a wide variety of factors, which may include assimilation of speakers into other linguistic groups due to internal migrations, inter-marriages, survival of too few speakers of a language etc. the death of languages is usually a slow process that may span decades or centuries. However, globalization and the rapid spread of communications has not been kind to many languages; many languages in regions such as India and Africa and India are slowly dying out, and as a possible interesting fallout of India's language policies, languages are becoming 'disempowered'; they are slowly losing their literary traditions, and scientific and literary progress in such languages has been stymied. Thus, India's language policy may have allowed both English and Hindi to encroach on other Indian languages. As there are rarely facilities to learn a schedule eight language outside the state, and no atmosphere has been created to encourage the learning of Indian languages other than Hindi, people often learn languages, including foreign ones, which are not useful to them. With the growing craze for English medium schools, where Hindi is the only available option as a second language, other Indian languages are slowly getting encroached upon. This is the situation at least in the short-term; there have been movement to protect and reverse linguistic decline round the globe, and most have been initiated by the speakers of languages themselves, such that annihilation of relatively widely spoken languages would be either apocryphal, or would take place extremely slowly or would be so rare that they would warrant a case to case study. In our paper dealing with the 'Aryan' problem, we argued that the PIE, which evolved into Vedic Sanskrit in India, did not wipe of the other languages of the region, but only interacted with them as was explained. Bhojpuri has seen a popular revival in recent times in India, has begun to be known for its vibrant entertainment industry, and its speakers have now begun to demand official recognition. Spanish in Paraguay is estimated to be spoken by only seven percent of the population as a native

language. It is known to a larger percentage of the population in the country, however. Guarani is the mother tongue of ninety percent of the population, and a large percentage of the population is bilingual, with Spanish only more popular in cities and in formal usage. Although education has been traditionally in Spanish, the trend is now changing, and education is now being made available in Guarani as well. The Jivaros or Shuars of Equador have succeeded in implementing their language in education, and Spanish is only taught in addition to the local language. Likewise, Swahili, unlike other languages native to the region, has made some progress in checking the spread of English in Tanzania, and Bambara, has made some progress in challenging the power of French in Mali. This is in contrast to countries like Zambia where English reigns supreme, but has led to a cultural alienation between the privileged speakers of English and the rest of the population. Ngugi wa Thiong'o likewise blames English for creating a gap between the haves and the have-nots in Kenya (Ngugi 1981). We may propose a 'Yoyo model of Cultural diffusion' here, where a new idea or trend at first spreads rapidly, and then retreats partially till an equilibrium is achieved. This may arise due to the premise that humans are not logical beings and may not also be able to gauge the long-term implications of a new trend early. Another extension of this would warrant situations where this happens multiple times; for example the domination of various dialects of Hindi by Standard Khadi Bholi may not have been purely politically-dictated or driven by political exigencies. There was a genuine demand for a usable lingua franca that could facilitate easy communication between speakers of the Hindi-heartland's mind-boggling variety of dialects. This would have allowed for an easy spread of the language or even subordination of dialects till awareness of linguistic rights spread. Linguistic rights cannot again obviate the need for a practical lingua franca. Hence, there is always a demand for a standard variety of usable Hindi. This process results in a very slow death of dialects if at all, and the progression from stage (a) to stage (d) in Walsh's phase of linguistic decline is usually a slow one and may span several centuries in many cases, and would depend of the strength and number of speakers of dialects or minority languages. This observation may still be seen as controversial in many circles, but would warrant a closer study, and exceptions, if any, may be carefully documented. Salikoko F. Mufwene of the University of Chicago words this appropriately, when he talks about the myth of killer languages "Likewise, languages cannot be issued death certificates either, not really the kind that can be issued for an organism, a human being for instance. Although we have usually claimed that a language dies when its last speaker is dead, reality also tells us that the process of death itself started long before the death of the last speaker (Thomason 2001), when the population of its speakers lost their critical mass and often also when its structures were seriously eroded by those of the prevailing language, as in the case of Sutherland Gaelic (Dorian 1981)." The road to glory, it must be said, is commonly littered with impediments, and the spread of English or French this far has been far from smooth. One may study the standardization of Afrikaans, Bahasa Malaysia and Bahasa Indonesia in recent times and study the effect of this standardization on other dialects and languages. Another example would be the replacement of several indigenous languages of Southern and Central Sri Lanka, by the language of immigrants i.e. ancestors of Sinhala over millennia. The conclusions from such analogies would be obvious: while such processes do work they work extremely slowly and may span life-times if not centuries.

Some scholars also think that war, genocide and imperialism can also impede the development of languages, but their complete annihilation under such circumstances may be unlikely. For example, it is believed that a hypothetical ancestor of the present day Bantu family of languages in Africa, called Proto-Bantu was spoken somewhere in Africa, and that a hypothetical spread of speakers of such languages not only wiped out speakers of other languages but also led to the spread of the Bantu family of languages over a wide region. It is the author's personal opinion that such hypotheses are perhaps gross over-simplifications that may need re-assessment. The rapid spread of English across

the world in modern times and its near-total stranglehold over science, research, international communication and even diplomacy will unquestionably have an impact for the world's other major languages; as globalization in its present form is too recent, it may be premature to make a comprehensive judgment of the impact of globalization on the world's languages. Did English directly lead to an extinction of a large number of languages across the globe, or wherever languages did die out, was it a combination of many factors, as it is most likely to have been? An empirical and an experiential study may be warranted here, and some of the other principles laid out in this paper would undoubtedly come into play.

Scholars have proposed four phases or degrees of language decline (Walsh 2005), and the various scenarios we have analysed so far may be compared with the following stages. Given the fact that there are an estimated eight thousand languages in the world, around four thousand languages or those usually with the lowest numbers of speakers, or those which are merely seen as dialects of another language, face extinction. The remaining languages, particularly those with a larger number of speakers may not face a threat of extinction, and may see some form of a revitalization or role change, despite a loss of many of their functions, and the characteristics and the role or function played by the language would be a crucial determinant in this context. The loss of a large number of native speakers of a widely-spoken language cannot therefore happen under ordinary circumstances despite the winds of internationalization or any other forces which have yet to materialize this far. By inference, the world's total number of extant languages in the long-term may be between two thousand and four thousand. Far fewer will survive as literary languages, and even fewer languages will survive as languages of science and technology. Walsh's four stages of linguistic decline are:

- (a) Language shift or language decay is a category of language decline where speakers have a limited vocabulary in their native language and more often use a new language in which they may be semi-fluent or fluent. (Hill 2001)
- (b) Language endangerment exists when a language has fewer than 10,000 speakers.
- (c) Near-extinction is a situation in which only a few elderly speakers are still living.
- (d) Language extinction occurs when the language has no competent language speakers.

Any revitalization strategies should involve a study of the role of the function of such languages and to work on the innate strengths of such languages in different contexts. For example, in the city of Bangalore, the Information Technology capital of India, English is the pre-eminent language of science, technology, commerce and economic aspiration. In recent years Hindi or Pidgin Hindi has become an entry-level link language in the city despite its non-existent written usage. There is an ongoing debate in state government circles whether the primary language of instruction should be in Kannada, the language of the state, or in English. In spite of the encroachment of its domain by multiple forces, literature in the language i.e. Kannada is actually thriving and the state arguably has a higher literary output than many neighbouring states, despite having ceded many functions to other languages such as English and Hindi. Marathi drama and theatre is flourishing for example, despite the encroachment of that language by both English and Hindi. To phrase it differently, most major languages in India cannot cross stage 'a' easily, as they have political patronage in their states. This may hold good despite other factors such as the countries skewed demographics. Therefore, while the spread of standardized French subordinated many of its dialects, (the same happened in England and Italy as well), the Norman conquest of England starting from 1066 till around 1250 AD could not do the same for English. However, the spread of a language into a region always tends to over-ride some of the functions of the other language, and in this case, the above event is associated with the rapid

transformation of the English language. Thus, linguistic equations are never zero-sum except in extremely rare long-term situations, or situations involving 'special conditions' such as a very low number of speakers, assimilation due to immigration or situations involving languages which are dialects of other languages. However, the encroachment of a language by another language will impact it negatively and lead to an eventual loss of some of its functions, though usually not totally. If the external force is withdrawn, it would still have altered the other language or languages significantly, and on a permanent basis. This needs to be understood as a general principle and exceptions evaluated on a case to case basis.

Thus, if a and b are functions of languages A and B respectively, and a_1 is the sum total of the functions of language A after encroachment by B ,

If $a=x$,

Then, the following hold good

Firstly, $a_1+b>x$

Secondly, $a_1<a$, i.e. a_1 is always less than a

Thirdly, $a_1>0$

Or, $0<a_1<a$

Exceptions to this principle would be relatively few or would be attributable to 'special conditions' and may warrant a case to case study. Readers may also read the section of Contextual suitability, Role-based suitability, Contextual indispensability and Role-based indispensability.

12. The Legal framework in a country and inconsistencies in legal framework can also greatly impact the dynamics of language spread

It would also be obvious to most that the Legal framework in a country and inconsistencies in legal framework, if any, can also greatly impact the dynamics of language spread. Likewise, the political structure of a society can also have a major bearing on the dynamics of language spread for e.g. India has always has a parliamentary-style Democracy and a mixed economy as opposed to centralized planning and Communism adopted in the Soviet Union and other countries. Hindi was only declared to be the official language of the Central government after independence, and anyone with a working knowledge of the legal framework or the constitution in India will point out that the nation has never had a concept of a national language. Hindi is also almost never an official language of non-Hindi states and has virtually no official use in such states. India's language policy is also obviously antithetical to the idea of federalism, and the Private sector does not espouse the idea of giving special privileges to Hindi over other languages as the working language in the private sector is English in most cases, or the local language of the region in some cases. This leaves English as the only common denominator between the Central Government, the state governments and the private sector. Although many checks and balances have been made available in India, India's language policy is potentially at odds with UN declaration of Linguistic rights, and could be largely considered as ill-conceived. More importantly, it is greatly at odds with itself. Although it was doomed to fail from the start, large sums of money were spend on it with a fond and an illusory hope that it might succeed. We have discussed this in great detail in a previous paper. The language policies of the erstwhile Soviet Union, may not only have been against the idea of linguistic rights, but may also have been at variance with most of the principles mooted in this paper. This, was, as is now widespread knowledge one of the most significant factors which led to that nation's cataclysmic collapse. On the other hand, immigrants to

the United States from various nationalities and linguistic groups tend to be less worried about their linguistic rights, and tend to assimilate completely within a generation or two, undermining the linguistic diversity of that country, and their languages may thus disappear entirely from the region unless immigration from the source country continues. The same may not hold good in case of Suriname: perceptions of linguistic inequality or superiority may apply.

The idea of linguistic rights is a relatively new concept and may not have been widely known to most planners at the time of India's independence. A treaty signed in 1919, for example, attempted to ensure recognition of many minorities in Europe. Article 27 of the International Covenant on Civil and Political Rights (1966) declares "In those states in which ethnic, religious, or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with other members of their group, to enjoy their own culture, to profess and practice their own religion, or use their own language." The UN charter for example, forbids discrimination on the basis of language, and calls upon nations to formulate equitable policies. The Conference on Security and Co-operation in Europe (CSCE, the Helsinki accords) contain detailed proposal to protect linguistic rights. The Council of Europe's proposed European Charter for Regional or Minority Languages recommends a massive support for minority languages. The UNESCO is also working on the rollout of a "Universal Declaration of Language Rights."

13. Language in multi-lingual societies and internal Population dynamics

Another interesting question is to what extent Population dynamics can have a bearing on the overall language dynamics of a country like India. This is of great relevance in India where skewed Total Fertility Rates have been observed, and hence the percentages of people speaking different languages is expected to change widely in the coming decades. TFR's by state have varied from a low of 1.6 Children per woman in West Bengal to 3.5 Children per woman in Bihar in 2014. If Union Territories are included, Chandigarh has a total fertility rate of just 1.3 children per woman. If TFR is taken at a district level, the variations in TFR will become much wider as Kolkata has a TFR of just 1.2 Children per woman while Shravasthi in Eastern Uttar Pradesh has a TFR of 5.9 children per woman or twice as that of Pakistan or Bangladesh, higher than every country in the Middle East, and close to that of Sub-Saharan Africa. However, fertility appears to be falling rapidly everywhere, and India on the whole may reach a replacement TFR of 2.1 children per woman between 2027 and 2031, and it is unlikely that any state will have a TFR of over 2.1 children per woman by 2031. Therefore, India's 'demographic dividend' itself is short-term in nature. However, such variations in population growth will negatively impact the laggards more than it can help the cause of Hindi in India, despite the fact that it can boost its status as a spoken lingua franca in the short to medium-term, as the power not only of English within and outside India, but also of regional languages has to be reckoned with given the economic clout of the Non-Hindi speaking states.

14. The impossibility of adopting 'one-size-fits-all approaches'

Another key aspect to be borne in mind is the need to substitute terms such as 'impossible' by terms such as 'unlikely'. Terms such as 'impossible' have no place in such an analysis as there can be countless exceptions for every rule, and this is primarily due to the fact that the nature of Languages, the attitude and loyalties of speakers of different languages can vary on a case to case basis, precluding or rendering meaningless, generalizations of any kind. The term 'unlikely' can however be used forcefully to special effect, and we will always subscribe to the eighty twenty rule. Other scholars would then need to produce insurmountable evidence to 'prove' scenarios that are deemed to be 'unlikely'. Thus, as always, over-simplification and over-generalization are antithetical to progress. We may put to use some of the principles proposed in our earlier papers to carry out deeper and context-

driven analyses: Dialectical approaches and reconciliation of contradictory evidence (we proposed the terms FDARC or Formal Dialectical Approaches for the Resolution of Conflicts), CRCDE or Continuous Reconciliation of Contradictory Data of Evidence, and Reflective Equilibrium through role-swapping (RERS) are some of the tools we proposed to resolve conflicts. These approaches can be adopted in addition to other already-existing dialectical approaches such as those which were propounded by Hegel and reinterpreted by Marx, and other approaches such as Rawl's reflective equilibrium, standard Devil's advocacy & Brainstorming techniques such as the Delphi technique and Edward De Bono's Six Thinking Hats. Constant introspection and re-examination is necessary as scenarios may change drastically; no one could have envisaged globalization in its present form just thirty years ago, or the collapse of the Berlin wall, for example. Likewise, newer situations and challenges may constantly present themselves, and a rigid one-size-fits-all approach will work against the idea of adaptive reasoning.

Advantages and uses of this approach

The principles of language spread in multi-lingual societies, if properly understood, can be put to clever and very effective use in a wide variety of situations not only in India, but anywhere in the world and could provide a very practical usage of DPPF or Dialogue between past, present and future techniques and several other areas in Applied Linguistics. The following are the advantages and uses of a systematic study of the dynamics of language spread in multi-lingual societies. We list possible uses and benefits of this approach below:

Intended for a clearly-defined target audience

Another feature of this paper is that it is intended for a clearly-defined target audience which includes policy-makers, planners, educationalists, arm-chair scholars, sociolinguists, social anthropologists etc. to help them greatly in policy-formulation and decision-making, and is as such written from their perspective or point of view. The objective of this is that these represent the key decision makers in any scenario, and will be able to put these principles to appropriate usage. However, the paper is general enough to be understandable to the lay-man as well.

Root cause analysis

Studies such as these can easily be put to productive and fruitful use in a wide variety of situation. For example it can be used to carry out Root cause analyses not of failed language policies, but also of any interesting observation or linguistic situation across the world and can likewise be used for other DPPF or Dialogue between the past, present and future techniques, as all the principles formulated as a part of this paper are purported to be of a universal nature. Such a Root cause analysis will also enable alternative solutions that are more likely to work in the light of different contexts and situations not only in India, but also elsewhere in the world to be formulated and critically evaluated. Similarly, new proposals can be constantly evaluated against the backdrop of all the evidence accumulated and presented in this paper, and the principles enunciated this far.

Scenario-building and Predictive analysis

The principles of language spread, if properly analysed and documented, can prove to be an invaluable tool for carrying out various kinds of analysis such as evaluating the efficacy of a language policy formulated for a country or region, and can also provide a framework for various kinds of scenario-building and predictive analysis that can be put to reliable use in almost any part of the world. This can be carried out by adopting a layered approach and putting to use the principles such as the 'Theory of linguistic Osmosis' as was explained in the paper. This would entail an analysis of the dynamics of

language spread in different regions and then aggregating them as required to facilitate scenario-building. For example, the dynamics of language spread in Switzerland can be understood in a larger European context, and this can in turn also be used to predict language dynamics in Europe. The inferences made from such a study could then be used to predict the growth or decline of English or French in Europe for example, and the results drawn from such an extended study can be further used to draw inferences at a global level. All observations noted, and interesting exceptions or phenomena, if any, can be carefully noted and used for further detailed and rigorous study, and can be used to furnish extensions to the concepts in this paper.

Can be used as a stepping stone for research on the dynamics of language spread at a global level

This approach will equip us abundantly to research the dynamics of language spread at a global level; ideally, studies should be carried out at the level of a multi-lingual society or for our purpose a linguistic community, a linguistic block or a political and economic entity and then aggregated, as the forces at the global level may prove to be too complex, too feeble or merely an aggregation of forces operating at the aforesaid levels. Forces operating at a global level are likewise likely to be too complicated to grapple with directly in most cases, or largely imperceptible with the exception of a few cases involving truly international trends such as the wide spread of English or to a lesser extent, Spanish or French, and such studies may be largely unproductive or ineffective if approached directly. Such exercises can also be made pro-active instead of predictive and these must be accompanied by a demand analysis and a demand-supply gap analysis if attempts are to be made to change dynamics of language spread at a global level through language promotion. How successful such endeavours would be would depend on a case to case basis. The success of English appears to have been largely accidental; the British appear to have colonized all the right places, unlike the French, the Dutch or the Portuguese.

Guide to educationalists, politicians and scholars

A systematic study of the dynamics of language spread in multi-lingual societies can be an invaluable tool for educationalists, politicians and scholars in formulating new policies or understanding short-term and long-term effects of different policy frameworks and analysing the reasons for the success and failure of already-implemented policies. It can be of great use to arm-chair scholars to understand and formulate key principles of language spread, extend or modify them in different contexts, or in the light of new evidence, and propose new principles as may be required. It can also be used by other anthropologists and scholars pursuing related fields of study, to extend or generalize these principles for their respective fields of study. For example, Intellectual and creative output in India is widely believed to be very poor and India ranks poorly in the Innovation Index. Apart from the low standard of living, the widespread poverty and the lack of research infrastructure, the 'linguistic distance' between English which has become a passport to power, and other Indian languages is a key factor in stifling creativity. As Hindi nationalist Alok Rai put it "In the olden times there was a discrimination between the 'Aryan' and the 'Non-Aryan', today it exists between those who know English and those who don't." How true. This statement should not be however be seen in the light of narrow Hindi parochialism but is true from the perspective of all Indian language speakers as well.

This unnatural gap between Indian languages and English can only be bridged by a combination of the following factors:

- (a) A more need-based and a market-driven education system with an emphasis on foundational competencies in all subjects taught
- (b) A greater emphasis on application of knowledge learnt

- (c) A greater focus on creative thinking at all levels
- (d) Compulsory high-quality education in the mother tongue especially in rural areas
- (e) A slow transfer of skills from the mother tongue to English such that students are not flummoxed, overwhelmed non-plussed at the graduate level when learning is expected to be exclusively in English, dissuading students from pursuing higher studies
- (f) An exclusive focus on functional, spoken and technical English as opposed to English literature and poetry which should at best be made optional or not taught at all
- (g) Availability and dissemination of scientific literature in various Indian languages for readers at various levels, (this is something that select private companies appear to have achieved admirably)
- (h) Bridge and booster courses in English at various levels to help bridge the often unnatural gap in speakers' fluency in his native languages and English. This is often of serious concern in states like Gujarat.
- (i) Pedagogical effectiveness etc.

The effects of a properly conceived and implemented education system on the GDP on a country can be miraculous and most modern research links linguistic distance and linguistic ability to economic outcomes.¹⁹ In addition, approaches such as these, can eventually be put to use by historians for DPPF or Dialogue between the Past, Present and Future analyses that we proposed in a previous paper. Studies such as this can also be of great use to the layman to help him understand and come to practical grips with many of the seemingly mysterious forces that greatly affect his daily life.

Other Proposals

Several other solutions can be implemented as the time has come to think of long-term sustainable national integration strategies, and those which will work in the longer term. India is an emerging superpower, and other countries in the region and beyond will look up to India for light and inspiration. India may not have been ready for a United States of India model in the early years of independence. Now it probably is and has already been moving in that direction. It perhaps may have no other option but to move in that direction. Centralization may be antithetical to the very idea of India and can only serve to destroy it. Statist policies may have been opposed to the very idea of India.

The three language formula may be changed to provide for the teaching of the language of the state, English and one other Indian language as a third language, which the student may choose. If this is difficult to implement, we can also have a composite third language taught which would include two or three living Indian languages. The objective of the third language would be to provide only a basic knowledge of these languages. Alternatively, we may implement a completely different kind of a proposal. People may opt for anyone living Indian language, which in most case may mean their mother tongue, the pre-condition being that they learn the local language of the state in which they are residing in. Schools can decide to introduce them depending on the demand, and the system should at least provide for this. This concept has been working well in some Indian states e.g. Telugu schools in Tamil Nadu, and this has to be fine-tuned and tweaked. This would also address the problem of the inadequacy of infrastructure to learn Indian languages throughout India. We can have a combination of all these. Now the question arises about the continuance of Hindi as a mandatory third language. There may be several pros and cons to this. The chief argument for the teaching of Hindi is that it will facilitate the pan-India spread of an entry-level link language. However, those who do not agree with this point of view can cite the fact that a working knowledge of Hindi is common among

¹⁹ Ingo E. Isphording and Sebastian Otten The Costs of Babylon – Linguistic Distance in Applied Economics

the populations of West Bengal and Nepal where Hindi is not formally taught. The only concerns here are that facilities to learn the mother tongue are scant in India, outside the state, and even a country like Sri Lanka is better placed in this regard, and that promoting the language of a community beyond a point may cause them to think they are superior and promote other kinds of friction. Reverting to the two-language formula would also free up time for the teaching of other subjects (as knowledge of a third language as per our proposals would only be elementary) and would also force the Central Government to re-think its language policies from scratch. In a way, even Pakistan's language policies could be construed as being more scientific, and a country like India should formulate language policies that others want to emulate. The continuance of English-medium schools is another contentious issue, and theoretically English-medium education should be construed as wrong. Few would want to deny their children the benefit of the best education in a competitive environment, all politicians of all hues and colours are known to send their wards to plush English schools. Alternative approaches to bridge the unnatural gap between students of English-medium schools and non-English medium schools can be thought of, and this can include, apart from the proposals presented in a previous paragraph, waiver of proficiency as an entry criteria to colleges for non-English medium students (They can be tested for basic working knowledge of English only); they can pass English proficiency tests later, as their confidence increases. Likewise, bridge and booster courses in English can be organized at a graduate level as well.

In addition to all this, the Centre can set up a body to promote Indian languages, set up libraries, and research institutes in every town and district, translate international books into all Indian languages, make technical information available to the common man, especially information which is most needed by him in areas such as Agriculture and basic science, give away prizes to scholars, provide translation services in the Lok Sabha and the Rajya Sabha in all Indian languages so that only people from a few states do not benefit. This would address the criticism that the Central Government is doing nothing to promote Indian languages other than Hindi, and that the private sector has put up a much better performance in this regard. There may be thousands of other possible solutions, literally thousands. A well-thought through education system and language learning policy can greatly reduce the gap between the haves and the have-nots, and can greatly facilitate the ascendancy of India as an economic super-power. Focussing on universal literacy and proficiency in reading and writing in Indian languages across all states in India will also greatly improve the status of Indian languages both in India and abroad, Hindi included, will allow literature in Indian languages to flourish, besides leading to a vastly enhanced creative output, and mutual respect for speakers of various Indian languages. This will allow different Indian languages to spread across India, and it is likely that Hindi will be an important lingua franca across many parts of India for the foreseeable future. This approach may also encourage Indian children to opt for learning living Indian languages instead of opting for foreign ones, consolidating the power of Indian languages. It will also ensure that India's language policies are synchronous with the dynamics of language spread, and will not throw up counter-reactions. Few will deny this is the only way forward, and the stakes for the Indian economy are huge.