Developing Cogent Strategies for the Lexical Development of Non-Dominant Languages: Empowering Linguistic have-Nots and Maximizing Linguistic Performance

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Abstract:- We begin this paper by emphasizing the importance of language policy and language planning processes, and investigate its history in different contexts. We also draw reference to our previously published paper on the empowerment of linguistic have nots, and attempt to present and propose classificatory mechanisms of languages from the aforesaid perspective. We also then review the concepts of pedagogy, verbal intelligence, linguistic enculturation, linguistic ethnography, the Sapir Whorf hypothesis, linguistic workarounds and econolexia, and review and study patterns of lexical development among individuals in different contexts, and in different parts of the world. We interface these observations with first and second language acquisition patterns and theories as well. We then end this paper by debating and proposing various strategies for the lexical development of languages, particularly strategies for the lexical development of less dominant and future-ready languages. We do this by studying different case studies and experiences drawn from real-time studies carried out and conducted in different parts of the world, particularly experiences from developing countries, and then drawing inferences and generalizations there from. We anticipate that this would constitute an extremely important component of our globalization of science movement by boosting linguistic and economic performance of people in different cultures and different parts of the world, particularly those who lag behind or are otherwise underrepresented in science and economic development.

I. INTRODUCTION

"The limits of my language means the limits of my world" – Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*

"Language is not a genetic gift, it is a social gift. Learning a new language is becoming a member of the club – the community of speakers of that language." –Frank Smith

We begin this paper by emphasizing the importance of language policy and language planning processes, and probe and investigate its history, particularly, though not solely in Indian contexts, where it is still referred to somewhat dubiously as the Rajbhasha policy- a policy that is, in the view of most, utterly outdated, and may be direly in need of a radical overhaul. We also then draw reference to our previously published paper on the empowerment of linguistic have nots (a paper that we had published in the second half of the year 2023), and attempt to present and propose some classificatory mechanisms of languages from the aforesaid perspective. We also then widely review the concepts of pedagogy, verbal intelligence, linguistic enculturation, and linguistic ethnography. We also then review other adjunct concepts such as the Sapir Whorf hypothesis, linguistic workarounds and econolexia, to the extent they add value, meat and substance to our proposals, and review and study patterns of lexical development among children and young adults in different societies and cultural contexts, and in different parts of the world, particularly in developing societies. We mesh and interface these observations with first and second language acquisition patterns and standard current theories on first and second language acquisition as well. The word "lexical" is a commonly used English term which means "pertaining to, or relating to any aspect of a language, including its diction and vocabulary". The term however, occupies a pride of place in linguistics.

We then end this paper by debating and proposing various strategies for the lexical development of languages, particularly strategies for the lexical development of less dominant, disempowered, and disenfranchised languages. We do this by studying different case studies and experiences drawn from real-time studies carried out and conducted in different parts of the world, particularly experiences from developing countries, and then drawing inferences and generalizations there from. We hope, expect, and anticipate, that this would constitute an extremely important component of our globalization of science movement by boosting linguistic and economic performance of people in different cultures and different parts of the world, particularly those who lag behind economically or intellectually, or are otherwise underrepresented in science and economic development. This is because western-centric researchers typically chase their own closeted intellectual pursuits, and do not apply social science research methods or social science research techniques to the common and

general utility of society, leave alone the needs and considerations of developing countries. A process of attempted and externally reinforced equalization needs to be put in place. We had termed this approach "isopedology'. We expect that "English medium" schools will continue indefinitely in India and elsewhere' however, students learning in their native languages should not be unduly handicapped. There can be via media solutions too; for example, students can be taught more necessary foreign languages are they emotionally mature and grow older. Some technical subjects may also be taught in foreign languages wherever necessary. [1][2][3][4][5][6]

II. LANGUAGE POLICY AND LANGUAGE PLANNING

Language policy represents a formal governmental position on various aspects pertaining to language use, including language use in formal and non-formal contexts such as politics, education, administration, the judiciary, business, trade and commerce. It also typically involves language regulation, and is often associated with legislation to encourage or discourage the use of different languages. Of late however, language preservation and the preservation of linguistic diversity has become a pressing and a burning issue in many contexts. According to linguists and scholars such as Robert B. Kaplan, Bernard Spolsky, and Joseph Lo Bianco language policy is considered to be a branch of applied linguistics. Language policy also interfaces with, and is integrated with language planning, and is in turn related to other diverse but allied fields of study and research such as language ideology, language preservation,

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[1] Towards a comprehensive compendium of factors impacting language dynamics in post-globalized scenarios: Presenting principles, paradigms and frameworks for use in the emerging science of language dynamics Sujay Rao Mandavilli ELK Asia Pacific Journal of Social Sciences Volume 6, Issue 3 (April –June 2020)

[2] Observations on language spread in multi-lingual societies: Lessons learnt from a study of Ancient and Modern India Sujay Rao Mandavilli, Elk Asia Pacific Journal, 2015

[3] On the origin and spread of languages: Propositioning Twenty-first century axioms on the evolution and spread of languages with concomitant views on language dynamics Sujay Rao Mandavilli, ELK Asia Pacific Journal of Social Science Volume 3, Number 1 (2016)

[4] Introducing Anthropological Economics: The quest for an Anthropological basis for Economic theory, growth models and policy development for wealth and human welfare maximization, Sujay Rao Mandavilli, ELK Asia Pacific Journal of Social Sciences Volume 6, Issue 3 (April –June 2020)

[5] Postulating 'Ethnography of Enculturation': A high-level overview of various social science research techniques that can be used to study human enculturation processes Sujay Rao Mandavilli IJISRT July 2023

[6] Empowering 'Linguistic have-nots': Empowering 'Linguistic have-nots' in the interests of faster economic, social and cultural progress and development across cultures and societies Sujay Rao Mandavilli IJISRT, October 2023

and language education, among several others. Many definitions have been proposed for language policy. According to noted American linguists Robert B. Kaplan and Richard B. Baldauf, "A language policy is a body of ideas, laws, regulations, rules and practices intended to achieve the planned language change in the societies, group or system". (Kaplan & Baldauf 1997) According to Australian linguistics professor Joseph Lo Bianco, language planning is "a situated activity, whose specific history and local circumstances influence what is regarded as a language problem, and whose political dynamics determine which language problems are given policy treatment". These descriptions, we believe bring out various aspects of language policy extremely aptly and succinctly.

The concept of language planning and its use to bring about social and cultural change, and promote other aspects such as linguistic equality, language preservation, promotion of inclusivity and diversity, etc, may be traced back to the year 1966 with the publication of the American linguist Joshua A. Fishman's book "Language Loyalty in the United States". This scholar has worked extensively on language policy and bilingualism, and had Yiddish Jewish ancestry. The term "language planning" was however first used in the year 1959 by E. Hagen. According to E. Hagen, "language planning encompasses the normative activities of language institutions and committees, forms of language use, the language revolution and all perspectives in this area". However, language policy does not generally include and encompass the lexical development of languages, and the assessment of the tools and techniques thereof; this is a virgin area that we believe needs to be formally studied in the years and decades to come.

In India, the Rajbhasha policy dates back to the dawn of the twentieth century when English still ruled the roost in India and was still a primary lingua franca. Way back in the year 1906, Mahatma Gandhi wrote in his book "Hind Swaraj" or Home Rule, "A universal language for India should necessarily be Hindi, with the option of writing it in Persian or Nagari characters. In order that the Hindus and the Mohammedans may have closer relations, it is necessary to know both the characters. And, if we can do this, we can drive the English language out of the field in a short time". At times, however, Gandhi supported Hindustani as an intermingling between Hindi and Urdu to promote Hindu Muslim unity. However, partition killed the case for Hindustani, and attempts to Sansktitize Hindi began in right earnest. After India's independence, the Indian constitution provided that Hindi and English were to be the languages of the Central Government until 1965, when a complete transition to Hindi would be made. There was however a protest against alleged Hindi imposition in many states including South Indian ones, (a particularly violent agitation occurred in Tamil Nadu in the year 1965) and the transition to Hindi was never really completely made. Indian states mostly use their own local languages and English for administration. Artificial words were often half-heartedly coined in Hindi (none in other Indian languages) as a part of the Rajbhasha policy. These include words for tennis, cricket, and football. These are almost never used in daily

life, and the use of English words reigns supreme. There is as such no comprehensive policy for lexical development of Indian languages in place by the Indian government. This is the crying need of the hour and day.

There are also a large number of English words widely used in the French language. Examples of these include le tennis for tennis, la baby-sitter for babysitter, besides many, many more. There have also been many artificial attempts to create new words in the French language (Examples of such technical words include l'ordinateur for computer, la souris for mouse, le mot de pass for password etc). However, many of these words are not in popular or widespread use. Linguists must always learn from their past experiences. The lexical development of languages must be always user-friendly, and practical-oriented, satisfying the principle of "practicalism". We swear by this concept at all times. It must also have maximum social impact, and must strive to change the world for the better. Indeed, these are crude rules of thumb, but can be effective in making the world a better place for all its denizens to live in. Half-baked, ad hoc, or poorly thought through lexical development polices will not augur well either well for the education system or society; indeed, they will impede students intellectual and professional development greatly, and will constitute an economic and a cultural deadweight to boot.[7][8][9][10]

➢ *Types of Languages*

We may add an interesting twist here, and attempt to categorize languages based on a totally new set of parameters. While these could come into widespread use in general linguistics eventually, they are particularly suited for the concepts proposed in this paper. Hence, this attempt:

• Language whose grammar and diction was formally codified at some point. For example, we have the codification of French grammar which was carried out by the Academie francaise, a quasi-politically constituted academic body which was established by Cardinal Richelieu in the year 1635, subsequently suppressed and eventually restored by Napoleon Bonaparte in 1803. Panini, a great philologist, logician, and grammarian, also codified Sanskrit grammar (i.e. the grammar of Classical Sanskrit) around 600 BC or a little later than this, and is considered to be among the world's greatest grammarians. His work was highly influential, and influenced scholars such as Ferdinand de Saussure, and Leonard Bloomfield. Likewise, the grammar of Tamil, an ancient 2500 year old language, was codified

over 2000 years ago, by Tholkappiyar. The work is known as Tholkappiyam probably during the second Sangam period, though controversies surround the exact dating of the texts.

• Language whose grammar and diction was never formally codified. The English language which is west Germanic language, falls into this category, because it evolved more or less naturally, at least in relation to French and other European languages, and may be historically classified into Old English, Middle English, and Modern English. This language is a formally used official language in around fifty nine sovereign nations around the world, and several international bodies such as the United Nations; the language shows no signs of declining, even though the colonial era ended decades ago. It is today the most widely used language in science, technology, education, tourism, trade and the internet, and leads French by a wide margin. However, some pundits believe that the English language will peak by around the year 2050, level off, and then gradually decline as other languages gain in importance. We also hold and endorse this view, though the future is indeed always notoriously hard to predict.

➢ *We may also Classify Languages into:*

• *Languages that Primarily Evolved and Spread Through the Spoken Medium:*

Most less developed languages may primarily fall into this category. In most such cases, scripts may have been added or superimposed on primarily spoken languages later on, often by borrowing them from other languages, and then modifying them. Such languages may be characterized by the presence of a large number of regional dialects – besides also acrolects, mesolects, and basilects reflecting affluence and educational accomplishments of speakers – which may all be fully or partly mutually intelligible. In such cases, the process of dialect leveling may be in various stages – for example, it may be in an initial stage, an intermediary stage, or in an advanced stage. We can also cite the example of Nouichi of Ivory Coast, a more recently originated spoke dialect. This is now widely becoming a spoken lingo in many parts of the country, and is slowly said to be displacing French, at least in some roles and functions. This is a completely different case, but falls broadly under this category of languages. We also then have the case of diaglossia, (where two variants of the same language usually formal and non-formal, are used for different purposes within the speech community) and spoken languages eventually diverged from written forms of the language, and the latter evolved relatively more slowly, or not at all. This can be found in spoken French, were the consonants at the end of each word are commonly not aspirated in the spoken form of the language due to historical changes in the spoken form of the language. In Tamil, the spoken variant of the language is also different from the written form. Arabic too has many dialects from Oman in the east to Algeria in the west. The written form of Arabic has however been standardized, and is used in formal contexts. We also have the concept of dialexia here; this would be determined by comparing the spoken diction with the written vocabulary.

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[7] Tollefson, James W. (1989). Planning language, planning inequality: Language policy in the community. London: Longman

[8] Arzoz, X., "The Nature of Language Rights". Journal on Ethnopolitics and Minority Issues in Europe (2007)

[9] Kaplan, Robert B.; Baldauf, Richard B. (1997). Language planning from practice to theory. Clevedon: Multilingual Matters

[10] Spolsky, Bernard (2004). Language policy. Key topics in sociolinguistics (1. publ ed.). Cambridge: Cambridge Univ. Press. p. 23.

In some languages, the spoken diction is relatively very small at least in relation to the written vocabulary, and is determined by the lower level of education of people in such societies. It may also demonstrate the presence of liturgical and sacerdotal traditions, and the presence of a small number of controlling elites. In many such cases, a larger and a richer vocabulary is used in formal, written versions of the language only, and dialects still prevail. We may call all such languages "logophones", though we do not know if such terms will ever catch on. Logo is the Greek word for speak.

- *Languages the Primarily Evolved and Spread Through the Written Medium:*

As an extreme case, we may cite the example of Esperanto which was a fully artificially created language, proposed to be used as a lingua franca. This was created in the year 1887 by the Opthalmologist LL Zamenhof. This was artificially instituted in a European context nearly one hundred and fifty years ago, but was scantly and scarcely used. It was widely considered to be a failure, and has now more or less completely fallen into disuse, though some two million people are said to know it or use it. Sanskrit too, as it is taught today, is based on a purely written tradition, and so are many other classical languages. We may even call these "graphophones", though we do not know if such terms will ever catch on. (Grapho is the Greek word for formal).

We may also classify languages based into the following three groups from their point of readiness to handle educational, scientific, and technological functions. Most languages, at least in the real-world would fall in a continuum between these extremes. This classification of languages would be determined by both intrinsic and extrinsic factors. Intrinsic factors would include the state of the lexical development of each of the languages, either formalized and codified, or non-formalized and non-codified, etc, while external factors would include the number of schools formally teaching the language, the existence of scientific and technical journals, etc in that language which allow it to morph into a fully empowered form. Language dynamics also play a major role here, and language dynamics, and the various constituents thereof, may ensure that some languages are subservient to some others, and play second fiddle to them; this would naturally impede them from blossoming and flourishing, and realizing their full potential. In such cases, languages may also not fulfill or play certain specific roles, particularly pertaining to science, technology, and education. [11] [12] [13]

- *Fully Empowered Languages:*

Examples of such languages are English (and to a relatively smaller and lesser extent, French and German) which are widely not only used in the fields of science, but as lingua francas, and mediums of education outside their native contexts. In other words, their sphere of influence may also be very large, and spread over a large geographical region, though the latter may not necessarily constitute an adjunct requirement.

- *Partly Empowered Languages:*

Examples of such languages could include fairly developed and somewhat standardized languages such as Hindi and Bengali. Since these languages have some administrative power, and some cultural influence (they are also associated moderately with soft power or cultural power) they can be suitably empowered through the means and mechanisms of administrative machinery. They are also almost always already taught in schools either as a first language or a second language. It is this group, category, and class of languages that we focus on, for the purposes of this paper.

- *Non-Empowered Languages:*

This class and category of languages constitutes the hopeless category of languages. Some of these may be in steep and terminal decline, while several others may not. Some can even be revived or resurrected through the use of artificial means. However, since there is very little demand for these languages in general, they may not be able to discharge most roles or functions. We in general ignore this category of languages for the time being, and brush them under the carpet.

III. PEDAGOGY

The term Pedagogy is a widely used term in the English language. This term is derived from the old Greek word "paidagogia" which means the science of teaching and learning. It also typically studies the process and methodology of education, and how this process influences, and is turn shaped by a wide range of social, cultural and political factors, and the emotional and the psychological development of learners as well. The theory and practice of pedagogy must vary greatly based on different social, political, and cultural contexts, and we must not fall into a "Eurocentric trap" or a "Eurocentric rut" under any circumstances. Pedagogy as a formal science and an academic discipline, also studies the process of learning in relation to various objectives and outcomes such as the preservation and transmission of language and knowledge, and the fostering and inculcation of highly specialized skills. The concepts of the science of pedagogy must also be interfaced and meshed with the process of lexical development of languages. This would be extremely

[11] Agha, Asif (2006). Language and Social Relations. Cambridge University Press

[12] Aitchison, Jean (2001) [1981]. Language Change: Progress or Decay? (3rd ed.). Cambridge, New York, Melbourne: Cambridge University Press.

[13] Austin, Peter K; Sallabank, Julia (2011). "Introduction". In Austin, Peter K; Sallabank, Julia (eds.). Cambridge Handbook of Endangered Languages. Cambridge University Press. ISBN 978-0-521-88215-6

important, though we have already derived some basic concepts as a part of that process. [14] [15]

➢ *Verbal Intelligence*

The term "verbal intelligence" as it is widely understood, refers to the ability of people or speakers of a language to understand, comprehend and reason using concepts embedded in, or linked and tied to vocabulary. Verbal intelligence also impacts problem solving, abstract reasoning, and intellectual abilities in general. Linguistic intelligence is practically equated to the extent to which an individual can use language proficiently and competently, in both its written and verbal forms, to achieve pre-stated and pre-defined goals. This concept is naturally confined to, and limited by the state of the lexical development of a language. People who are more proficient in languages such as English which have a larger repertoire, can be generally said to have a higher degree of verbal intelligence, though this is by no means a hard and a fast rule. People who speak languages such as English may possess higher analytical ability and problem-solving skills, though this generalization can indeed be disputed if adequate evidence is presented. All languages are therefore, not certainly equal in terms of their lexical development at least, even though speakers of these languages may be emotionally attached to them. [16]

We can define linguistic inequality as a specific form of language differential which results from the unequal social valuation of languages, varieties, or "lects" (which may exist based on parameters such as region, age, class, etc.) and spoken or written communicative ability of speakers in a given community. There are generally believed to be three main types of linguistic inequality, namely subjective inequality concerning perceptions of others' speech; communicative inequality regarding effective communication; and strictly linguistic inequality relating to linguistic knowledge. In conclusion, linguistic inequality breeds social inequality and vice versa. The idea of linguistic intelligence forms an intrinsic part and parcel of the American psychologist Howard Gardner's multiple intelligence theory that deals with individuals' ability to understand both spoken and written forms of a language, as well as their ability to speak and write that language with a fair and a reasonable degree of proficiency. It is therefore imperative that lexical development of languages be taken up on a war footing by language planners and policy makers. This will impact economic performance and the economy in general besides enhancing verbal intelligence.

This crucial aspect has alas, been brushed under the concept from too long. [17] [18]

➢ *Linguistic Ethnography*

The term 'linguistic ethnography' as it is used today refers to a relatively insignificant but gradually growing body of research carried out either by, or both ethnographers and linguists who combine linguistic and ethnographic approaches in order to understand how language is used or gainfully employed in a wide range of social and cultural settings and contexts. Much of the foundational work in linguistic ethnography was carried out by scholars of the likes of Frederick Erickson, John Gumperz and Dell Hymes, but their work was subsequently, and in due course, extended by other researchers and ethnographers such as Jan Blommaert, Marilyn Martin-Jones, Ben Rampton, Angela Creese and Celia Roberts. However, linguistic ethnography has not yet come of age, and is yet to attain a status where we can claim it to be a cogent and a coherent discipline and a field of study. Though the sky is the limit (linguistic ethnography can touch on, and impact many subfields of linguistics) we are barely skimming on the surface yet, and there is a lot more work to be done before it can impact planning, policy making, and can determine language outcomes. Outputs from linguistic ethnography also must naturally be used in the process of lexical development as well; however, there has been very little work done in this field yet. This would dictate patterns of language acquisition and linguistic preferences, etc, and drive the process of linguistic and lexical empowerment of languages forward in a way that benefits the maximum number of people. [19] [20]

➢ *Language Acquisition*

Language acquisition is an extremely complex process by means of which humans acquire the innate capacity and attendant capabilities to use and comprehend language through complex processes such as speech perception and speech production as explained in linguistic anthropology. In other words, it explains the process by means of which human beings acquire the ability to interact and communicate using the language. Language acquisition is also associated with the process of linguistic enculturation or linguistic acculturation. Through the process of linguistic enculturation or linguistic acculturation, individuals acquire many aspects of language, including phonology,

[14] Karl Rosenkranz (1848). Pedagogics as a System. Translated 1872 by Anna C. Brackett, R.P. Studley Company

[15] Bruner, J. S. (1966). Toward a Theory of Instruction. Cambridge, Massachusetts: Belkapp Press.

[16] Luwel, Koen; Ageliki Foustana; Patrick Onghena; Lieven Verschaffel (Apr 2013). "The role of verbal and performance intelligence in children's strategy selection and execution". Learning and Individual Differences. 24: 134–138

[17] Linguistic Inequality is a Social Inequality, The Berber Example in the Southern Mediterranean, Tassadit Yacine

[18] Szalontai, Adam; Katalin Csiszar (September 2013). "Genetic insights into the functional elements of language". Human Genetics. **132** (9): 959–986

[19] Introducing Long-term Ethnography: Positioning Long-term Ethnography as a valuable tool for longterm Ethnographic research Published in IJISRT Volume 7 Issue 7 July 2022 Sujay Rao Mandavilli

[20] Unleashing the potential of the 'Structured and Annotated Participant-driven Appraisal' technique in Ethnography: Towards the universal realization of Multivocality in Ethnographic studies Sujay Rao Mandavilli, ELK Asia Pacific journal of social sciences, 2018

morphology, syntax, semantics, and an extensive vocabulary.

The ideas of identity formation and individuation are also very closely interrelated with the process of linguistic enculturation which occurs in every culture or society on the planet, though perhaps in myriad different and interesting ways. Enculturation is usually defined as the acquisition, (particularly during childhood and early adulthood or adolescence) of the prevailing characteristics, ideals and norms of a culture (including of course, language and linguistic culture) which help him comprehend the dynamics and workings of that culture deeply, and become deeply immersed and engrossed in it. The culture in question here, is the culture which he is raised in, and whose values and value systems he naturally assimilates and absorbs. In some cases, the individual may be exposed to a different macro culture in his childhood, and he acquires the norms and values of that society through a process known as acculturation, which is opposed to enculturation. Many different definitions have been attempted for the term enculturation. Both linguistic enculturation and linguistic acculturation processes need to be carefully studied, including patterns of lexical development, so that these are incorporated into language planning processes, and language policies as required. [21] [22] [23]

➢ *Language Acquisition Theories*

Many different language acquisition theories have been developed over the years. For example, behaviourist psychologists such as BF Skinner developed their own theories under the aegis and umbrella of behaviourism, and these are widely popular even today. These theorists developed concepts such as positive reinforcement and negative reinforcement, and proposed that children imitate adults. According to the linguist Noam Chomsky, the human brain possesses an innate language acquisition mechanism that enables children to learn and generate grammatically correct sentences with minimal or no external correction or input. This theory is equated with the innateness theory. Such theories cannot however be easily tested or empirically proven. The Cognitive Theory of language acquisition is another theory of language acquisition proposed by the eminent Swiss psychologist Jean Piaget who tied acquisition of language to a child's mental or cognitive development. According to him, a child has to understand a concept before he can learn the linguistic expression which expresses that concept. The interaction theory proposed by Bruner on the other hand, emphasizes interaction between parents and children as the primary driving force behind the acquisition of language. More recent theories have included

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[21] Mirror for Humanity: A Concise Introduction to Cultural Anthropology (McGraw-Hill, 2013 15th Edition) (ISBN 0078035015)
[22] Hoebel, Adamson E. (1954). The Law of Primitive Man. Harvard, Massachusetts: Atheneum.
[23] Robert L. Winzeler, Anthropology and Religion: What We Know, Think, and Question, Altmira Press, Lanham, USA, 2012

emergentism, empiricism, statistical learning, and the relational frame theory.

➢ *Second Language Acquisition Theories*

There are many theories on second language acquisition as well, and this field emerged as a distinct field of study beginning in the 1960's and the 1970's. One of the main objectives of theories of second-language acquisition is to throw light on how people who already know one language learn another second language to varying degrees and levels of proficiency. The field of second-language acquisition draws heavily from fields such as linguistics, psychology, sociolinguistics, neuroscience, cognitive science, and pedagogy. The different fields involved in second-language acquisition are primarily grouped into four major research strands which are the linguistic dimensions of second language acquisition, cognitive dimensions of second language acquisition, socio-cultural dimensions of second language acquisition, and the instructional dimensions of second language acquisition. In the early years, Pit Corder and Larry Selinker contributed heavily to the field, and proposed concepts such as interlanguage which are widely used even today.

By the 1980s, the theories of Stephen Krashen had become extremely popular in second language acquisition. His theories are widely known as the Input Hypothesis. According to Stephen Krashen, language acquisition is driven by comprehensible input which refers to language input that learners can easily understand. In the 1990s, several new theories on second language acquisition were developed, examples being Krashen's input hypothesis, the monitor model, Michael Long's interaction hypothesis, Merrill Swain's output hypothesis, the competition model, connectionism, declarative models, procedural models, the critical period hypothesis, and Richard Schmidt's noticing hypothesis. In the interests of space, we do not propose to delve into them in depth here. The theory of universal grammar also contributed to second language acquisition theories. Other theories were linguistic theories of SLA based upon Noam Chomsky's universal grammar, and psychological approaches such as skill acquisition theory and connectionism. The sociocultural theory, which sought to explain second-language acquisition in terms of the social environment of the learner also became extremely popular at the turn of the century. Outputs from first and second language acquisition theories and observed patterns must naturally be used in the process of lexical development to the extent they can shed light on mental, cognitive and emotional processes of development and language learning patterns. This would dictate patterns of language acquisition and linguistic preferences, etc. However, many of these theories are all just pies in the sky. These are abstract, Eurocentric endeavors based on nerdism and an absence of "practicalism", and not based on any rocksolid ethnographic data. That is why many course corrections are required in various fields in the social sciences. That is what the globalization of science movement is all about. As a part and parcel of this, our motto and avowed objective is to always practicalize. Second language acquisition patterns

must be vetted against language dynamics as well. For example, English remains a widely spoken and used in Nigeria particularly in major urban areas, but will always remain a foreign language and may never supplant Nigeria's major indigenous languages completely. [24] [25] [26]

➤ *Interlanguage*

An interlanguage is an idiolect (speech habits or speech peculiarities commonly attributed to a person) which has been developed by a learner of a second language which preserves some features of their first language. Therefore, an interlanguage may be referred to as an unique linguistic phenomena at the intersection of two different languages. This concept is interlined with the concept of an interlanguage theory, which is attributed to Larry Selinker, who promoted his ideas in the 1970's, and who in turn borrowed many of his ideas from Uriel Weinreich. This concept has a relatively limited utility from our perspective, though it may indeed still be born in mind. More importantly dialects at the interface of first and second languages need to be properly understood, along with the speech patterns of second language learners and second language users. [27]

➤ *Sapir Whorf Hypothesis*

The Sapir Whorf hypothesis is an idea of linguistic relativity, which was developed by Edward Sapir, and Benjamin Lee Whorf based on earlier works by Wilhelm von Humboldt and Johann Gottfried Herder. These ideas were later substantively and significantly reworked by Roger Brown and Eric Lenneberg as well. This idea reflects a principle which suggests that the structure and the complexity of a language determines or directly and indirectly influences its speakers' worldview or cognition processes, which in turn determines or influences their perceptions of the wider and larger world. This idea is not without controversy, and many variations of this concept have existed for several decades. According to a strong variant of linguistic relativity, known as linguistic determinism, language determines thought processes and linguistic features may severely curtail and restrict cognitive ability. Indeed, many Indian languages, and several other languages around the world have a smaller vocabulary and diction than English. However, it is a verifiable fact that native speakers of these languages are able to communicate in these languages much more proficiently and effortlessly. Even speakers of these languages who are otherwise fluent in English may prefer their own languages for most contexts

and situations. This has to do with much more than language ideology; speakers may employ what we had called linguistic workarounds for this purpose. We had described this concept previously. The concept of econolexia means that there is an economical usage of words, and the same words or expressions may be employed to express many concepts. [28]

• *Case Studies:*
Where some artificial attempts succeeded, and where some failed

Let us now review and briefly touch upon a diverse array of case studies drawn from different international, social and cultural contexts. We will therefore, in parallel understand where some artificial attempts succeeded, and where some failed. These case studies would be extremely interesting indeed, as the layperson will be able to understand them, and relate to them. There is nothing wrong with borrowing words from other languages wherever necessary. English has also borrowed liberally from other languages all around the world, including less prestigious ones and this has endowed it with enormous flexibility and adaptability not certainly seen in languages such as French. As a result of this, of course among several other factors, French is way less popular than English in most spheres and domains, and is also seen to be in decline around the world. On the other hand languages such as Japanese and most modern Indian languages have borrowed words informally from English. In due course, the formal codification of word borrowing in these languages must occur, though we believe the process must be accelerated.

The vocabulary of Old English was relatively low, and there may not have been a major difference between European and Asian languages in this regard. Many new words were introduced or coined in the English language in the sixteenth and the seventeenth centuries (The number of words in the English language may have even doubled between the years 1500 and 1650 AD), the earliest dictionaries of the English language such as those complied by Robert Cawdrey, Thomas Blount, Thomas Elyot Knight and Edward Phillips contain only a partial compilation of words. Of these, the work by Edward Phillips may have been the most comprehensive, containing 11,000 words in 1656, 17,000 words by 1696, and 38,000 words by 1706 (This is on par with many modern languages). Therefore, the lexical development of the English language only began gradually thereafter, and it reached its present level of richness only in the past couple of centuries, especially after the industrial revolution. In the present day and age, the number of words in the English language has increased manifold, and this may be on account of several factors such as the hegemony of the USA, and the ongoing processes of globalization.

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[24] Krashen, S.D. (1989), We acquire vocabulary and spelling by reading: additional evidence for the input hypothesis, Modem Language Journal, vol. 73, nº4, pp. 440–464

[25] VanPatten, B. and Williams, J. (eds) (2007). Theories in Second Language Acquisition: an Introduction. Mahwah, NJ: Erlbaum.

[26] J. C. Richards, Error Analysis: Perspectives on Second Language Acquisition, Longman Press, 1974, pp. 34–36

[27] Tarone, E. (2001), Interlanguage. In R. Mesthrie (Ed.). Concise Encyclopedia of Sociolinguistics. (pp. 475–481) Oxford: Elsevier Science

[28] Pütz, Martin; Verspoor, Marjolyn, eds. (2000), Explorations in linguistic relativity, John Benjamins Publishing Company, ISBN 978-90-272-3706-4

IV. REVIVAL OF HEBREW

Biblical Hebrew also sometimes known as Classical Hebrew is an archaic and a now extinct form of the Hebrew language, spoken by the Israelites in the area traditionally known as "the land of Israel", which lay to the west of the Jordan River and to the east of the Mediterranean Sea. Therefore, this language was considered to be extinct for several centuries as it had fallen into general disuse. The revival of the Hebrew language was a process that began in parts of Europe and the southern part of the Levant region in the end of the nineteenth century and continued well into the twentieth century, through which the language's usage changed from a purely liturgical language to a widely spoken and written language used by the Jews in Israel and other parts of the world. This process began as Jews from different parts of the world began to settle in the Israel Palestine region in the early part of the twentieth century. Hebrew became a lingua franca as Arabic speaking Jews native to the region, and immigrant Jews speaking diverse languages began to use Hebrew as their common lingua franca owing largely to religious, cultural and traditional factors. At the same time, there was a revival of Hebrew in parts of Europe. Today, Hebrew is the sole official language of Israel. This case study is extremely useful from our perspective. It points to the fact that artificial attempts to mould and shape language can indeed be extremely successful to a point. [29]

➢ *Simplified Chinese*

Simplified Chinese characters have been promoted and encouraged by the Chinese government in the People's Republic of China since the 1950's to promote widespread literacy among the masses and the wider populace. This was done by reducing the number of strokes to write Chinese characters, and further reforms were instituted in the 1960's in a process that continued at least till 1977. In 1977, during the height of the cultural revolution, a second round of simplification began, but was widely and largely seen as being highly unsuccessful. Today, simplified Chinese has become one of two standardized character sets used to write the Chinese language. The other character set is traditional Chinese characters, which were formally employed to write Chinese. Simplified Chinese characters are officially and formally widely used in mainland China and Singapore, while traditional characters are officially used in other regions such as Hong Kong, Macau, and Taiwan. Thus, a case study method can be employed to identify what went right, and what went wrong in many cases. In this case, governmental efforts may have largely succeeded due to the limited literacy in the region. Cuneiform is also another important ancient script which we must mention in passing. It was used by scribes in ancient Mesopotamia, and its complexity would have prevented its widespread adoption and usage, among other factors. [30]

➢ *Pinyin*

Hanyu Pinyin, also simply known as pinyin, is Romanized version of the Chinese writing system also sometimes referred to as the Chinese Phonetic Alphabet. This system was developed in the 1950's by a group of linguists led by Wang Li, Lu Zhiwei, Luo Changpei, Li Jinxi, and Zhou Youguang based on earlier Romanization attempts. This system of writing was first proposed at the Fifth Session of the First National People's Congress held in the year 1958, and since been revised multiple times. It is used with diacritics to capture different intonations. It has official status, and is officially used in China, Singapore, Taiwan, and by the United Nations where it is even formally taught to students. It is however, less common in Taiwan. Wherever used, it complements standard Chinese characters, and has not supplanted them completely. The Indian government however, does not have any policy for either Romanization (if required), and the lexical development of languages. It is clearly unable to think beyond the Rajbhasha policy, and there is scant awareness of scientific concepts or linguistic matters there. The desire to boost sectarian pride and influence also dominates the region's affairs. [31]

➢ *Esperanto*

Esperanto (or "one who hopes" in English) is perhaps the most ambitious attempt to create an artificial spoke and written language. This is sometimes referred to as a "constructed international auxiliary language". This language was singlehandedly created by L. L. Zamenhof in 1887, and was intended to be a universal second language for international communication owing greatly to the simplicity of its grammar. It was therefore referred to as "the international language" or "la Lingvo Internacia". The grammar and vocabulary of this language was however, based predominantly on European languages, and it cannot therefore be really called universal in nature. This language largely failed; a relatively small number of people who are called Esperantists (in relation to its target audience) learnt it, and only an extremely small number of people ever used it in daily life, unfortunately. No nation has ever adopted it as an official language. [32]

➢ *Adoption of Roman Script in Malaysia*

The modern Malay and Indonesian alphabet also known locally as the "Askhara Latin" (or "Latin alphabet") consists of the twenty-six standard letters of the basic ISO Roman-Latin alphabet. It is the de facto script used to write

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[29] Doron, Edit (2005), "VSO and Left-conjunct Agreement: Biblical Hebrew vs. Modern Hebrew", in Kiss, Katalin É. (ed.), Universal Grammar in the Reconstruction of Dead Languages

[30] Kane, Daniel (2006). The Chinese language: its history and current usage. North Clarendon, VT: Tuttle. ISBN 978-0-8048-3853-5

[31] Gao, Johnson K. (2005). Pinyin shorthand: a bilingual handbook. Jack Sun. ISBN 978-1-599-71251-2.

[32] Auld, William. La Fenomeno Esperanto ("The Esperanto Phenomenon"). Rotterdam: Universala Esperanto-Asocio, 1988

the Malay language today and has official sanction and official status, the other one being Jawi which is a modified Arabic script. Jawi itself is thought to have replaced the Pallava, Kawi and Rencong or Surat Ulu scripts during Islamic missionaries efforts to spread Islam in the region. These old pre-Jawi scripts are now essentially defunct, and now only have historical value or significance. The importance of the latter i.e. Jawi, is also generally seen to be in decline at least in relation to the Roman script. Jawi is relatively more commonly used in Brunei than in either Malaysia or Indonesia, where it is co-official with the Roman script.

> *Adoption of Roman Script in Indonesia*

Indonesia also likewise uses the Latin alphabet, also popularly and widely known as the Roman alphabet, owing to several historical, economic and political factors. The Latin script was first believed to have been introduced to Indonesia during the colonial period when the Dutch East India Company (and later, the Dutch colonial government, directly) wielded and exercised an enormous influence over the region. The Roman script, along with Bahasa Indonesia was standardized when Indonesia gained independence from the Dutch in 1945, and is now extremely popular in both governmental and non-governmental use. It may be noted here that at the time of independence, most Indonesians did not speak the standard form of the language. The "Van Ophuijsen Spelling System" used in the Dutch East Indies and later Indonesia was based on the Dutch alphabet and Dutch orthography to make Indonesian words intelligible to Dutch colonial administrators. In 1972, both Malaysia and Indonesia adopted a spelling reform plan, called the "Perfected Spelling System" in Indonesia and the "New Rumi Spelling" in Malaysia to standardize many features and patterns of usage of the script. In spite of all these efforts significant spelling differences remain between the two countries. These efforts can offer salutary cues and insights for Indian policy makers and language planners. However, the latter is largely a misnomer. No cogent and coherent language planning or policy measures worth their salt exist in modern, independent India other than the archaic Rajbhasha policy. Even the ruling Bharatiya Janata Party in India follows an extremely antiquated mindset. According to some of its leaders, English is put on par with French and German. French and German are almost never used in India. One cannot afford to learn the hard way; we not have enough time at our disposal. What happened in West Bengal when the left-front government there banished English from government run schools? It increased the divide between the rich and the poor and adversely affected poor students. [33]

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[33] Vikør, Lars S. (1988). Perfecting spelling : spelling discussions and reforms in Indonesia and Malaysia, 1900-1972 : with an appendix on Old Malay spelling and phonology. Dordrecht, Holland: Foris Publications. ISBN 90-6765-237-7. OCLC 19648139

V. JAPAN

Japan uses English words extensively and widely, even though education takes place primarily in the mother tongue. It is generally estimated that around ninety percent of foreign words in Japanese are English. The first major language contact between the English and Japanese languages is thought to have taken place in the port of Yokohama, when Japan opened its doors to international trade. This led to a new kind of a pidgin being formed, though this pidgin was short-lived, and eventually died out. As foreigners and expatriates came to the country particularly during the Meiji restoration, English gradually became an important language of intercultural communication. English was sometimes seen as being chic and trendy and some English words were used even in daily communication by some sections and segments of the Japanese population. They were also used in television, radio, and cinema. Such words were also Japanized, and often written in the Katagana script. In the year 1871, compulsory English education began, and many entrance tests and examinations conducted by universities made English proficiency mandatory. In due course, many Japanese acquired some basic language skills, though the proficiency of most people in the English language continues to be extremely low. There were different strands of nationalistic, anti-western, and anti-imperialist sentiments to varying degrees in different periods of modern Japanese history, though it could be useful to understand the impact of these sentiments on attitudes towards the English language in general, and English proficiency and fluency as well.

Though Japan did not probably have a lexical development policy as detailed or comprehensive as our own, education in the medium of the mother tongue largely worked, and Japan is at the forefront of technology and innovation today. Attempts to coin native equivalents for English words also sometimes failed; this could hold some inspiration for Indian language planners and policy makers as they draw up their own language development programs. Many technical words in Japanese, particularly those pertaining to computer jargon or computer terminology, are English is origin. Examples of such English technical words in Japanese include aikon for icon, adoresu for email address, and so on. In the case of some other words, the pronunciation is significantly modified. Examples of such words include kurikku for click, and insutoru for installation. There is also an ongoing craze for learning English in China and an estimated three hundred million people are estimated to be learning it. Despite the growing economic and technological clout and prowess of China, Chinese language learning does not have any great demand outside of China, and may never ever become a global lingua franca either. Blame it all on language dynamics.

VI. SOUTH KOREA

The English language has become deeply entrenched into Korean society that English is estimated to make up over ninety percent of the word borrowings in the Korean lexicon today. The English language has also impacted South Korean culture, including fashion and pop culture significantly. It is also considered to be extremely important in business and higher education. The import of English words into the Korean language has particularly become more pronounced in the last few decades with the advent of the computer and the internet revolution, and English words are even beginning to replace Korean words in some cases, leading to calls for the protection of the Korean language in many academic and political circles. Anglicized Korean is also referred to as Konglish is some circles, and this is becoming increasingly popular. English words are highly Koreanized in some cases, and these may be unintelligible to native English speakers. However, education in South Korea is mandated in the mother tongue with English taught as the primary foreign language. There is also a great demand for English teachers in South Korea, and a lot of money is to be made in teaching English there. [34]

Many people especially in India and elsewhere are worried about the growing marginalization and irrelevance of indigenous languages, particularly the more major ones. On the other hand, other groups call such worries misplaced sentimentalism, and argue that economic factors must always take precedence. But whatever may be the case, disambiguation and concretization of concepts is indeed possible through the medium of extensive fieldwork and the ethnography. In this case, ethnography and fieldwork are being pressed into the service of society, and do not merely represent white man's curiosities as they sought to unravel the mysteries of the unknown and unexplored parts of the world. It is also indeed possible, that learning in the mother tongue is productive and beneficial as well, even when approached from a purely economic point of view; we need solid data and evidence to back all cases up; there may be no one size fits all approaches possible. We may need to study issues from the point of sociocultural groups and socioeconomic groups. Another new area of interest is how artificial intelligence based language tools can impact language dynamics. Again, a role-based, function-based, and a context-based assessment may be required to properly analyze the issue. We had presented these concepts in a previous paper on language dynamics.

➤ *Decolonization*

Decolonization is the exact reversal of colonialism, where colonialism refers to the process by which imperial nations establish and dominate foreign territories through the establishment of colonies, whose political and economic interests are then dominated. This process often serves the interests of colonizers exclusively, and the interests of the people residing in the colonies are severely compromised with. The process of decolonization began with independence movements in the colonies as many people in colonies began to stand up for the rights, and began clamoring for independence. Mahatma Gandhi and others began to fight for independence in India, and the movement gradually spread to other colonies. Winston Churchill and others were arch-colonialists; however, the British empire collapsed in the aftermath of the Second World War, and Clement Atlee decided to give India its independence. Major waves of decolonization occurred after this, in what resembled a domino effect, and several Asian and African nations began to get their independence after this. By the late 1950's, the colonial era was effectively over. However, French influence in some parts of Africa continues as a part of what one may call "neo-colonialism". In India the English language is as popular as ever, though French in Pondicherry, Karaikal, Mahe, Yanam, and Chandranagore, is on its death bed. Dutch is also nearly dead in Indonesia.

In spite of decolonization, several European languages dominate in Asia and Africa in various different ways. How this scenario may change in the long-term (even over the next couple of centuries) remains to be seen, as the future is fraught with uncertainties. It is at best a set of scenarios and possibilities. We however have no models of long-term linguistic change at present. These could indeed be extremely useful for planners and policy makers alike, and someone must work on them. We believe that factors in favor of local languages will override factors in favor or former colonial languages in the long term – this is akin to a spring reverting to its original position once an external force is removed. Also refer to our certainty uncertainty principle for the social sciences which can be eminently and fruitfully applied in this context. Indeed, this realization forms an important intellectual and a moral pillar upon which the entire edifice of lexical development of non-dominant languages primarily rests. [35]

➤ *Status of the French Language*

There has also been a general long and a slow decline and retreat of the French language, both in various parts of Africa and worldwide. In countries such as Cambodia, Vietnam, and Laos, French is in retreat, and is now restricted to older people. It may even become extinct there in the next couple of decades. In at least these three countries, English has now essentially become the first foreign language, and there is an ever escalating demand for the English language. Winds of change are blowing in Francophonie Africa too. This term, which was coined by the French geographer and colonialist Onesime Reclus in the nineteenth century, refers to African countries that were formerly colonized by France or Belgium. Algeria (which along with other countries in Africa, has now accorded primacy and a pride of place to Arabic) has of late launched a new pilot program to teach English to Algerian beginning

[34] Hadikin, Glenn (2014). Korean English: A corpus-driven study of a new English. John Benjamins Publishing Company. pp. 8–12. ISBN 978-9027269942

[35] Cooper, Frederick, Colonialism in Question: Theory, Knowledge History'', Berkeley: University of California Press, 2005

in elementary schools, and proposes to eventually expand it nationwide. This effort is widely seen as being successful, and may have a ripple and cascading effect throughout Africa and may eventually sound the death-knell of the French language in the region. Morocco and Tunisia are also now making following the footsteps of Algeria, and are making English language courses mandatory to school-going students. Rwanda has now said goodbye to the French language following strong anti-French sentiment, and in now focusing on both Kinyarwanda which is the national language, and English. It is rumoured and predicted in some quarters that Burkina Faso, a neighbouring country, may also eventually follow suits. Even in Francophile Lebanon, where French was highly favoured by elites, the language is said to be in gradual retreat.

English dominates the linguistic landscape in the Middle East so much these days, that even the ISIS (which is a terrorist organization) is said to have commenced English classes for its recruits. Mali more recently ended the status of French as its official language, and made it only a "working language"; In Mali, all the national languages were promoted as official languages. In multilingual countries like Congo which is dotted with numerous minor languages, the French language continues to be widely used as a neutral link language. However, according to many eminent linguists, a gradual process of pidginization and creolization can be expected to commence in these regions in future. In the Ivory Coast, a pidgin Nouichi by name, has already become popular, and is beginning to take centre stage, gradually displacing French in the process. In spite of Brexit or the exit of the United Kingdom from the European Union, the French language continues to be in gradual retreat in the European Union, in what appears to be an irreversible process. French is also said to be in gradual decline in the Canadian province of Quebec, despite heroic attempts to popularize it there. We may of course, need to ratify all these observations in relation to the concepts proposed in our papers on language dynamics which were published in 2015, 2016 and 2021. For further clarity readers may read the aforesaid papers, which are also cited in this paper for the benefit of readers.

➢ *Neo-Colonialism in Africa*

Neocolonialism, a term first coined by Jean-Paul Sartre and Kwame Nkrumah the first president of Ghana, refers to the control by a former colonial state or power usually over another politically independent state, or politically nominally independent state (usually over its a formerly colonized region or territory) through indirect means. The term neocolonialism came into popular usage after the Second World War to refer to the continuing economic or non-economic (often military) dependence of former colonies on erstwhile colonizers – This concept was widely used to denote the actions of France, a former major colonial power which allegedly still continues to exploit many African nations who are often too poor to raise their voice, though it can be used in other contexts as well. In extreme cases, neo-colonialism is referred to as "flag independence" – this means that former colonies are only nominally independent. Neo-colonialism is often promoted

through the establishment of colonial bases, and currency non-independence. For example, we have the African CFA Franc or the Franc of the Financial Community of Africa, a currency that is still in use by many former French colonies. The term refers to two distinct currencies, namely the West African CFA Franc that is in use by eight West African nations, and the Central African CFA Franc which is in use by six Central African nations. The value of these two currencies are pegged to the Euro, and rules require member states to deposit half of their foreign exchange reserves with France. Supporters of CFA Franc says it imparts otherwise sovereign nations with a modicum of economic and financial stability. Critics of CFA Franc says it undermines countries economic and financial independence. [36] [37]

Since independence, France, according to its critics has covertly wanted to maintain and perpetuate its political power in Africa, and safeguard its economic interests there. It has done so through the use of various mechanisms such as its support for puppet regimes. The nature of French intervention varies from region to region. However, French authorities state that its continuing military presence in the region is to train local soldiers to fight, and boost their military capabilities as well. Countries that still have French military bases include Chad, Djibouti, Gabon, the Ivory Coast and Senegal. Anti-French sentiment is therefore still strong in France, and it remains to be seen how this will impact language dynamics in the region because English is gradually becoming more and more popular worldwide. We have had an attack on the French embassy in Ouagadougou in 2022, for example. In Niamey in Niger, in 2023, tens of thousands of protesters gathered outside a French military base demanding that French troops withdraw from the region. The issue is far from simple or easy however; As former French President Jacques Chirac is once believed to have stated, "Without Africa, France would become a third world country.' [38]

➢ *What is a Pidgin?*

A pidgin also often known as a pidgin language, is a highly grammatically –and often lexically- simplified means of communication that gradually develops between two or more groups of people speaking different languages and otherwise lacking a common means of communication, as they come into regular and often prolonged contact with one another: typically, its vocabulary and grammar are highly limited and restricted and often drawn from either of the two languages or several other languages, including perhaps a more dominant one globally, or in the region. These languages are also not formalized, varying in this context from a relatively more fully developed creole. This concept

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[36] Barongo, Yolamu R. (1980). Neo-colonialism and African politics: A survey of the impact of neo-colonialism on African political behavior. New York: Vantage Press

[37] Ankie M. M. Hoogvelt. Globalisation and the postcolonial world: The new political economy of development (Johns Hopkins University Press, 2001)

[38] Erforth, Benedikt. (2020) "Multilateralism as a tool: Exploring French military cooperation in the Sahel." Journal of Strategic Studies

is different from that of a lingua franca which denotes a more sophisticated and developed language that is used as a common means of communication between two or more groups. Pidgins are often used in trade and commerce, though they may slowly evolve into a cultural lingo. In most cases, they may not be considered to be elite, and may also lack, class, prestige and status. An example of a pidgin is Tok Pisin, an English—based pidgin used in Papua New Guinea.

➤ *What is a Creole?*

A creole language, also simply known as a creole, is a relatively stabilized natural language that develops over a period of time (usually one or more generations) from a more informal pidgin, as its grammar becomes stable, formalized and codified, and its vocabulary enriched. Creoles are studied through a branch of linguistics known as Creolistics. This typically happens over a generation or two as children receive instructions in pidgins from their parents. However, creoles typically have a simplified grammar compared to original parent languages, and most irregularities and inconsistencies in grammar are removed. They may also not replace the parent languages completely, which may still continue to be used indefinitely by the native speakers of the languages among one another. There may be around one hundred creoles worldwide, and most of these have emerged over the past few centuries. Creoles and pidgins are largely unknown in India, except that a highly simplified version of Hindi –mixed with a large number of English words- has emerged as a street lingo in most parts of India, except perhaps in Tamil Nadu and Kerala. It is however seldom used in a written form outside Hindi speaking states. While artificially created pidgins and creoles cannot work. We believe that creoles can be formally developed lexically. This is possible as and when these languages become ready to replace languages such as French in the realms of education, trade, and commerce. This may even improve the economic performance of nations in the long-term we believe. However, many issues such as the absence of training material and general wider literature in the language must be borne in mind. This can at best be a long-drawn and a protracted process. At the same time, it would be extremely profitable and beneficial to introduce a language such as English into the curriculum at a very early age. In another variant of the above concept, languages such as French may be artificially simplified by borrowing as many Africanisms as possible, and adding popular and widely used words from the local language or other more widely used languages as well such as international languages. We need hard evidence for planning; evidence and data must be the basis for everything, and locals must be involved in all stages of the planning process. To be honest and fair, the Author has minimal experience with Africa. He can provide a theoretical foundation, but must leave it to the locals to manage their affairs.

➤ *What is a Lingua Franca?*

A lingua franca also known as a bridge language, a link language, a common language, is a language widely and systematically used to make communication possible between groups of people who do not share a native language or dialect, and are therefore unable to communicate with each other. Lingua francas are often third languages that are different from either of the speakers' native languages, but are dominant nonetheless regionally or internationally. Lingua francas were attested to in many parts of the world, and have been known throughout human history. For example, we can cite Sanskrit which was the lingua franca of the elite in post-Harappan India. Latin was also used in many parts of Europe as a lingua franca. Lingua francas may bear many different functions. For example, English is popular and is widely used in trade, commerce, industry, science and technology, but less commonly used in cultural domains and spheres. Lexical development of lingua francas can also be carried out either formally or informally by drawing on local, regional and pan-regional languages and influences. This may also make languages easier to learn for large segments of the population. [39] [40]

➤ *The Case of Congo*

The Democratic Republic of the Congo in central Africa is a landlocked multilingual country where an estimated total of over four hundred languages, mostly minor ones are spoken. It is even said that around one tenth of the world's spoken languages are in Congo, and many are critically endangered. The official language, ever since the beginning of the colonial period, has been French, particularly of the Belgian variety, and is widely used in official contexts. Four of these languages have been declared as national languages, and these are Kikongo-Kituba, Lingala, Swahili and Tshiluba. However, French is widely used as a lingua franca, around the capital, and some other parts of the country. Lingala is also spoken in the capital region. Kituba or Munukutuba is a simplified Kikongo creole is used by around half of the population who lives in the south. Lingala is a language that is spoken mainly in the northern and the eastern parts of the country and has grown extremely rapidly since the turn of the twenty-first century. It is now widely used in music, and is seen as a part of Congolese culture. It is probably inevitable that French will decline in the long-term, though the process may be an extremely slow, and an imperceptible one, as French is rarely spoken on the streets. Congo is extremely important from our perspective. We would like to see how the concepts mooted in this paper can be put to practical and beneficial use there in the interests of economic, cultural and technological progress, and help people who find French too difficult or impractical. Refer the second half of the paper for further clarity. Existing pidgins can be reinforced and bolstered through our mechanisms. They can also be peppered with commonly and globally used words and terminologies, and can perhaps be introduced through the educational medium as well. We also have a paradox here. Do we take words from French or English? The jury is still out on which is the correct approach; however, pragmatism

[39] Hall, R.A. Jr. (1966). Pidgin and Creole Languages. Cornell University Press. ISBN 0-8014-0173-9.
[40] Heine, Bernd (1970). Status and Use of African Lingua Francas. BRILL. ISBN 3-8039-0033-6.

and practicalism always work out, and pan out rather well in the long-term. [41]

➢ *The Case of Senegal*

Senegal is a West African nation that achieved its political independence from France several decades ago. French however, still remains the official language of the country, as per the 2001 Senegalese constitution, and is still the language of administration as well as the language of education in state run schools. Wolof, language in the Senegambian sub-section of the Niger-Congo language family, is the most widely spoken national language in Senegal, and is spoken around the capital Dakar, and is used by five million people nationwide. It is also taught nowadays using the Roman alphabet. However, other languages such as Serer, Diola and Pulaar are also spoken. Another informal language called "Urban Wolof" has emerged in the recent few years. It is a mixture of Wolof, French and other languages. In and around the capital region, most people see a need to learn both these languages, albeit for different functions. The written form of French particularly extremely popular as a "high language", and carries with it a great deal of emotional appeal. English is now slowly and surely entering the mix, and is now beginning to be widely taught in Senegal at the secondary school level. The case of Senegal is somewhat different from that of the Democratic Republic of Congo given that there is a relatively dominant language spoken there. However, we would like to see how the general principles mooted in this paper can be applied in this context. We would also like to see how speakers of other languages react to the empowerment of Wolof. Again, there are no hard and fast rules, always keep your feet, eyes and ears on the ground. That should be our guiding principle always. [42]

➢ *Using this Approaches in Dominant Languages*

Dominant languages we believe must be further empowered, though not at the cost of minor languages. The concepts birthed and gestated in this paper can be first and primarily applied and implemented in languages where it pays to do so, especially given that there are time and cost factors and considerations involved. The third category of languages that we had described in an earlier part of this paper would be pretty hopeless from this point of view, and need not even be considered, even though other measures can indeed be instituted to save them from extinction. In India, there is an ongoing debate as to which medium of instruction is better, "English-medium", or say "Tamil-Medium", or "Gujarati-medium". This issue is extremely complex indeed, as there are many factors involved, including the paucity and dearth of English language teachers. We cannot naturally get into all dimensions of the issue here, though we can introduce concepts and principles that can aid in the process of decision making. Languages

for which these approaches and techniques can be considered perhaps include languages of the likes of Swahili – spoken widely in Tanzania, Kenya and elsewhere, including Uganda. The Roman script is widely used in Swahili, after the Arabic script fell into general disuse, Berber (Tamazight) – spoken in Northern Africa – though Arabic is dominant in the region, to a lesser extent to Yiddish – spoken by the Ashkenazi Jews, etc. The number of Yiddish speakers declined in the twenty-first century owing to the Holocaust, and to their migration to Hebrew. There has however been a gradual revival of the language in recent years. In studying and assessing various factors, local considerations, and the cultural profiles and linguistic preferences of native speakers – along with other realities – need to be taken into account and consideration. Needless to say, the principles of this paper must be applied to all major Indian languages as well.

➢ *Aspects to be Studied in Lexical Development*

The following aspects must be studied or kept and borne in mind before a formal study of languages and proposed approaches to lexical development is commenced. This is only an initial and a short list, and does not purport to be comprehensive, even though plenty of thought has already gone into it, as will be evident to most readers. We also believe this is the logical way to proceed and go, as Stalinist language models are doomed to fail in truly multilingual societies and countries. We had also explained the characteristics of truly multilingual countries in a previous paper. We had also explored the concepts of linguiculture and ethnolanguages earlier as well:

- Official position regarding languages: The official position regarding languages is often spelt out in the country's constitution, or any other alternative official documents. We would expect that the country's law is just and fair, and is also compatible with international law, and the linguistic rights of minorities. A country may have typically a national language, or it may have none. In many other cases, all important, or even all languages may become national languages. Some countries may have official languages, (typically one, but sometimes more) which may either be the same as, or different from the national languages or national languages. Sometimes, foreign languages may continue to remain official languages, and this is particularly common in case of formerly colonized countries. In some cases, sub regions may have their own official languages; this is particularly true of states, sub jurisdictions and principalities. There may be peculiar or interesting variations; for example, Mali recently relegated French to the status of a working language; it is no longer formally an official language there. The official position regard languages must be carefully analyzed and understood, and the aforesaid language policy must be fair to speakers of all language groups, besides maximizing productivity and efficiency.

- Study of the linguistic landscape: This would include a survey of all the major and minor languages spoken in a region, and the possible different types of interactions social, cultural and economic between speakers of

[41] Yates, Barbara A. (1980). "The Origins of Language Policy in Zaire". The Journal of Modern African Studies. **18** (2): 257–279

[42] Diagne, Pathé (1971). Grammaire de Wolof Moderne. Paris: Présence Africaine.

various languages. Role, function, and context-based study of languages must also be attempted. The linguistic landscape refers to the "visibility and salience of languages on public and commercial signs in a given territory or region". The linguistic landscape of a region is formally studied in a region as an intersectional analysis between several fields of linguistic such as sociolinguistics and psycholinguistics, for example. This study must also capture changing trends and must be as composite, multidimensional and comprehensive as practically possible,

- People's attitudes regarding language: This would include attitudes regarding the learning of their own languages, and the learning of other languages. This would naturally impact peoples' interest in learning various languages, and their ability to master and become proficient in various different languages as well. This process typically operates at various psychological levels, but must be formally studied nonetheless, preferably through the medium and mechanism of linguistic ethnography. There is therefore, a vast untapped potential here. We must also bear in mind the concept of linguistic ideology here, which can impact language learning outcomes. For example, there is a strong anti-French sentiment in many parts of Africa, and the usage of French continues because there are many national languages in some African countries, (some of them are maternal languages) and most of these languages are ill-equipped to handle administrative tasks. We may reiterate here that language ideology or linguistic ideology is a concept widely used in Linguistic anthropology, to describe people's beliefs or feelings about languages as used in their social contexts. This concept is based on ideas generated by scholars such as Valentin Voloshinov, Mikhail Bakhtin and Roman Jakobson. This can be of many types, for example Indian elites may naturally gravitate towards English because they want to differentiate themselves from the rest of the population. This may automatically make them more fluent or proficient in English by raising the awareness and interest regarding various factors pertaining to the English language.

- Role based assessment: Different languages may come to play different roles in society. For example, the English language in India is primarily used in the domains and realms of business, commerce, science, technology, and trade. On the other hand, the role played by the English language in other spheres is rather limited and a role-based analysis of language may be in order. This is also known as a language situation or an evaluation of the role of language in a social setting. For example, in East Africa, English symbolizes education and authority, while Swahili or the local language symbolizes solidarity or local ethnicity. Similar studies have been carried out in parts of Africa and Asia as well. (Scotton 1982)

- Context based assessment: Languages may also be typically be used in different contexts or social settings. Role-based suitability and context-based suitability ultimately leads to language displacement which happens when a language takes over specific roles from another language such as entertainment or politics. This process must however, be studied along with internal and external language dynamics. This process is in as advanced stage in countries like India, and to a lesser degree in Scandinavian countries. However, the role-based usage of language in India is poorly understood by planners, and often overlooked. (Pattanayak 1981)

- Assessment based on age group: In many case, an age-bracket based linguistic assessment may be either extremely useful or important; for example, in Laos, Cambodia, or Vietnam, the French language is generally restricted to older generations, and the younger generation prefers to use either the local language, or English. There is a gradual linguistic shift likewise in Francophone Africa, and the younger generation may gradually relegate French to the background, and accord more importance to English. The move away from French is particularly rapid in countries such as Rwanda, but much slower in countries such as Niger. Likewise, there may be variations in patterns of language use even in countries such as India. In India, the younger generation may no longer be ashamed to use the local language; instead, they may prefer to use the English language only where absolutely necessary. All these concepts and observations must however be ultimately attested to through the medium of linguistic ethnography, even though theorization is indeed permissible.

- Assessment based on gender: Sometimes, a gender based analysis as assessment of language use patterns may also be carried out, though this may be arguably less common or useful. This approach may have some practical implications, however. For example, in Mali and Senegal, men are more proficient in French than women. This is because men tend to perform outdoor tasks and chores more often than women do. This input may have some benefits for language planning, though its impact on this score may be relatively meager. However, in general, gender differentials may adversely impact the popularity of the language in the log-term.

- Assessment based on educational level: In some cases, assessment based on educational level, and educational accomplishments may also be carried out, and this would reflect the nature and pattern of the educational system in common use and practically deployed. Needless to say, it will also provide crucial inputs into the educational planning process.

- Assessment based on socioeconomic group must also be carried out wherever possible or practicable. We may reiterate here that we had first defined the concept of sociocultural group in a paper on anthropological economics published a couple of years ago, and had then also extended it elsewhere. A socio-economic group as we see it, may be defined as a group that lies at the intersection of various social and economic factors. A socioeconomic class is a class which is determined taking into account, a group's economic and social status particularly in relation to various other socioeconomic groups. Characteristics that determine socioeconomic status may typically include various commonly studied factors such as employment, education, and income.

- Assessment based on sociocultural group: We had first proposed and defined the concept of sociocultural group in a paper on anthropological economics in the year 2020, and had also extended it elsewhere. To sum up and recapitulate, a sociocultural group is one which is carefully defined after a thorough and a systematic consideration of various social and cultural factors, and often takes into account and consideration customs, traditions, mores, lifestyles, habits, beliefs, and cultural patterns present in a group. It also seeks to understand human behaviour and mind-orientation from a socio-cultural perspective, and understand how all these factors may impact educational, employment and economic outcomes as well.

- Change in linguistic landscape since say ten or twenty years ago: in order to perform such an exercise, we may draw heavily from the concepts of cultural and linguistic snapshots. In order to perform such a kind of analysis, the use of apposite social science research techniques may be necessary, and long-term ethnography could be one among them. However, this concept is yet novel and new, and has yet to come of age.

- A study of some other aspects such as the etymological origin of different languages, and their respective positions on the cladistic tree (This is a method of taxonomical classification with some use in the field of linguistics) may also help, though this may be relatively unimportant in this context. The term etymology refers to the study of the origin of words and the way in which their meanings have changed or diversified in a region or all across the world in historical time and space. This can throw some light on the patterns of language usage and cultural preferences, though to a smaller degree.

- Other aspects such as individuation, identity formation, and the symbiotic approach to sociocultural change must also be borne in mind as necessary.

- The lack of availability of trained and qualified teachers is a major bottleneck, and must be rectified and remediated through teacher training and other measures; this is however, far easier said, than done. The national education policy of India or the NEP of 2020 accords a lot of importance to teacher training. However, training teacher on a new foreign language and can span several years, as language acquisition is typically a very cumbersome and a tedious process.

- In another interesting twist, the impact of technology on language learning may be assessed not just in India or in developed countries, but all over the world in different political and cultural contexts. Thus, smart phones and the internet may expose students to English from a young age. However, the increasing availability of artificial intelligence based translation tools since the 2020's may reduce the glamour, allure, and glitz associated with the learning of the English language. This is just an interesting observation, but more fieldwork generated data may be needed. As such, this would not only be an interesting, but a practically useful exercise to undertake.

> *Criteria that need to be Borne in mind During the Process of Lexical Development of Languages*

The following criteria need to be borne in mind during the process of lexical development of languages, though this is only a short and an indicative list comprising only the more self-evident items:

- Ease of learning: The student and the learner must be able to learn and master both his native language and other dominant languages easily. In most other cases, the words need to be coined in such a way that will enhance his or her learning experience in various subjects besides the language or languages in question.

- Maximizing economic output: The economic output of a nation must also be enhanced in the process. This may be difficult perhaps to quantify and define at this point, but most be borne in mind nonetheless, and if possible be ratified through future ethnographic studies. For example, technical words may be adequately represented in the lexical development process.

- Maximizing cultural output: Likewise, the cultural output of a nation or a culture must be bolstered or maximized through this process and technique, if possible. Languages must therefore be equipped enough to handle social and cultural functions and maximize social and cultural output by making them media-savvy and technology-ready.

- Maximizing social empowerment and social mobility: Social empowerment and social mobility of speakers of a language (particularly disenfranchised sections and segments of the population) must be maximized through this technique by suitably equipping languages lexically, and making speakers proficient in them with a minimal degree of effort.

- Maximizing first language proficiency and competence: One of the core philosophy behind the lexical development of language is the maximization of the proficiency of students, learners or the general population belonging to various socioeconomic groups and sociocultural groups in the primary or native language wherever two or more languages are used in a region.

- Maximizing second language proficiency and competence: One of the core philosophies behind the lexical development of languages is the maximization of the proficiency of students, learners or the general population belonging to various socioeconomic groups and sociocultural groups in the dominant secondary or foreign language. Therefore, we will effectively be killing two birds with one stone. Creating an entirely new set of artificial words will greatly increase the burden and overheads on students by requiring them to learn to entirely different sets of words; plus, such words are not likely to come down to popular usage, as exemplified and evidenced from experiences in France.

- Alignment to the requirements of the job market: studies must be made ready for the job market, and must not be handicapped in any way; they must be ready to face the challenges of the job market at all times. Therefore, there must be an alignment to this requirement.

- Alignment to national or regional requirements: There must be an alignment with national, regional, sub regional or local considerations at all times wherever such considerations supersede international considerations and trends, or are in equal footing with international considerations and trends.

- Understanding language dynamics: concepts such as language dynamics which we have already discussed and debated upon at a very great level of depth over several years, can be empirically tested and verified using bona fide social science research techniques. Leaning outcomes can be assessed based on a correlation or input and output factors. Similarly, theories of social and cultural change can also be easily and competently tested. Theories of mind space, thought worlds, world views, mind orientation and cultural orientation etc can be tested though the use of appropriate social science research techniques. Our three papers on this subject were "Towards a comprehensive compendium of factors impacting language dynamics in post-globalized scenarios: Presenting principles, paradigms and frameworks for use in the emerging science of language dynamics" published in 2020, "Observations on language spread in multi-lingual societies: Lessons learnt from a study of Ancient and Modern India" published in 2015, "On the origin and spread of languages: Propositioning Twenty-first century axioms on the evolution and spread of languages with concomitant views on language dynamics", published in 2016. All these concepts we believe would be self-explanatory, and would also serve to reinforce and ratify all the concepts in this paper.

- Alignment with global trends: There must also be an alignment with global and international trends; India has stood to benefit from the English language proficiency of a segment and a cross-section of its population. However, global trends may change, and global forces may shift. For example, the world may get completely decolonized at some point, though such forces may also operate typically very slowly. We additionally, have very little visibility regarding the very distant future. Most other countries have very little options other than to swim with the tide. Decisions taken by individual countries, including less dominant ones may also impact the global linguistic scenarios and landscapes, albeit to varying degrees.

- Student friendliness and child friendliness: This concept is related to the ease of learning concept, and wherever possible and practicable, this factor and aspect also needs to be borne in mind.

- Meeting the needs of the underprivileged: The needs of underprivileged students, and economically disadvantaged students also need to be borne in mind at all times, particularly those from backward or rural areas or regions; this will also boost the economic profile and the economic potential of various nations.

- Reducing gaps between students belonging to different sociocultural and socioeconomic backgrounds: This may be interpreted in terms of an equalization mechanism which may be studied both quantitatively and qualitatively. For example, we can have an extremely useful approach that can be employed in India. We can study the relative performance between students of "English-medium", "Hindi-medium", and other language medium schools, and study patterns or convergence or divergence on the basis of various patterns over time. We may also study the differentials between elite and non-elite schools here, or schools in urban and rural areas.

- The students' ability to learn two languages together must also be taken into account and consideration wherever required. This will be akin to killing two birds with one stone. This must include the student's ability to grasp or pick up grammatical concept and idiom in the second (i.e. foreign language). Appropriate language teaching techniques are required here, including theories of pedagogical content which also apply to languages and language teaching and learning.

- Critical, unique and revelatory case studies must also be used as a basis for planning if required. For example, we have some "Hindi-medium" students who have become proficient or fluent in English at a later date. The Author personally knows many such people. If a large number of such instances are noticed or observed, it becomes a pattern or a trend. This would mean and imply that it is not always necessary to employ English as a medium of instruction.

➤ *Ethnography, Fieldwork, and Social Sciences Research Techniques as a Basis*

Ethnography, fieldwork, and social sciences research techniques must always form a basis and constitute a crucial input into the planning process, including of course, linguistic ethnography. The following factors must always be borne in mind:

- Will lexical development of non-dominant languages by importing a large number of English words boost people's technical skills? This is a question that can be systematically addressed and answered through the use of social sciences research techniques.

- Will lexical development of non-dominant languages by importing a large number of English words boost people's English fluency eventually? This is another question that can be systematically addressed and answered through the use of social sciences research techniques.

- Will lexical development of non-dominant languages by attempting to create words based on people's own cultural preferences boost people's technical skills? This is yet another question that can be systematically addressed and answered through the use of social sciences research techniques.

- How will creating complex and artificial new words in non-dominant languages impede people's intellectual development? Or will it impede and hinder learning processes? This is yet another question on everyone's minds and lips. Social sciences research techniques can come in handy here.

- How is linguistic proficiency linked to economic outcomes? Are nations with a higher linguistic proficiency more economically prosperous? What is the exact correlation between the two? How do linguistic empowerment and the lexical development of languages help?

- Patterns of lexical development in children both for first and second languages can also be studied with the level of granularity and detail that is practically possible, as this could constitute an extremely important input for syllabus design. Reinforcing or compensatory mechanisms can then we carefully and systematically worked out. In order to do this, a sample of one hundred words or so can taken or drawn out from the English repertoire or lexicon, or from the repertoire or lexicon of some other language. These words are also graded based on their simplicity or complexity. Tests are then administered to various children from various age groups, and belonging to various linguistic, sociocultural and socioeconomic backgrounds with an adequate representative sample size to see whether they comprehend them or not. Then, another set of one hundred words or so words is taken out, and the same test is repeated. Based on this, the patterns of linguistic enculturation or linguistic acculturation is determined.

- It must be understood how well or poorly children master grammar and achieve fluency in a second language. Most studies would indicate that while words can be learnt more easily, fluency in an alien language would be hard to achieve. This indicates the importance of lexical development of non-dominant languages, naturally.

➢ *Representation of Various Groups in the Planning Process*

There must be a representation of various groups during the process of lexical development of language, and this must include at least the following groups in most cases:

- Representation from all linguistic groups in a country, region or state is usually necessary, and exceptions to this rule are usually very minor. Thus, in the case of India, the points of view of not only Hindi language speakers need to be taken into account, but the points of view of Tamils and others.

- Representation from subject matter experts is extremely important as word coinage would mostly encompass various fields such as botany, zoology, physics, chemistry, mathematics, sociology, anthropology, economics, or political science. Therefore, there must be an adequate technical representation.

- Representation of linguists: There must also be an adequate representation of linguistics at all times; we do not recommend a Eurocentric view or approaches here, fieldwork, ethnography, or other relevant and pertinent social science research techniques must always constitute the basis of planning.

- Representation of anthropologists and sociologists: There must also be an adequate representation of anthropologists and sociologists at all times; we do not recommend a Eurocentric view or approaches here, fieldwork, ethnography, or other relevant and pertinent social science research techniques must always constitute the basis of planning.

- Representative from educational departments, and other government representatives, including planners and policy makers: There must be an adequate representation from educational departments, and other government representatives, including planners and policy makers at all times.

- Eventual formulation of standards, guidelines and policies: There must be an eventual codification of standards, guidelines and policies which must serve as a benchmark for further planning and activity, not only in the country or region, but in other countries and regions. Pilot studies can therefore prove to be exemplars.

➢ *Approach to be Adopted for the Lexical Development of Languages*

The following approach we believe must be adopted for the lexical development of languages, though we invite opinions from other thinkers as well. This approach at best, constitutes a general, high-level, and a broad guideline. Scripts may or may not be synchronized. This process is commonly associated with political overtones and adverse political implications:

- Widely used foreign words in the non-dominant language may be retained as they are, regardless of whether there are local equivalents or not. These may be therefore, directly imported into non-dominant languages. We have concepts such as that of a skillet locale with measures a regions political and cultural dominance, though in most cases, linguistic dominance in a region may be tied to, or traced to historical factors, or less commonly, geo-political factors.

- Words for which they are no local equivalents may be borrowed into the non-dominant language. This may even be done with a vengeance as this approach will enhance students' lexical repertoire.

- Words which are widely used throughout the world, or a significant part of the world may be imported as they are to save the trouble and bother of coining new words.

- Words which are widely used throughout the world, or a significant part of the world may be imported as they are, even if there are local equivalents. This approach would make students comfortable in widely used terminologies from a young age.

- The principle of redundancy must be borne in mind: There must not be too many superfluous words in the non-dominant language, and even where they are necessary, must be introduced at the appropriate level.

- There must be traceability – simple foreign words must be introduced before more complex ones, or complex words that are dependent on simple words can be introduced. This is particularly important because foreign worlds may not be naturally learnt by students in the normal course of events.

- The principle of gradual progression: There must be a gradual progression of lexical terms introduced, and this must take into account and consideration, the learner's ability to absorb, and assimilate them without forgetting them in due course.
- The principle of completeness: all the required foreign words must be taught at the appropriate level, so that the student knows all the term and terminologies that are necessary to operate in the wider world, so that there is minimal self-learning involved at a later stage.
- Emotional maturity of students: The emotional maturity of students must also be borne in mind, and different words introduced only as and when required. We also have a concept known as the critical learning period hypothesis here; this refers to the period when children learn the fastest or most effectively. This period may pertain to ether general learning processes or to language acquisition. It is the second process which is largely related to the topic of discussion in this paper.
- Cultural preferences: The cultural preferences must also be borne in mind, and must be used wherever possible or necessary, as inputs into the syllabus formulation process. This can usually be studied only through the process and technique of linguistic ethnography, and we must resist the temptation of putting the cart before the horse here.
- Preferences of students belonging to different socioeconomic and sociocultural backgrounds must also be borne in mind, and the syllabus designed accordingly. We had defined these concepts previously.
- Technical words may be imported directly as they may represent widely used technical jargon. This principle we believe, would hold good for most jargon, though we indeed believe there could be exceptions.
- Internal references may be adopted wherever, and explanation to foreign words may be presented within parentheses using simple explanations in the non-dominant or the local language.
- Bilingual textbooks may also be provided wherever possible; this will particularly help children's parents to teach their children wherever required. Translations or less preferably summaries in the second language may be presented in a separate section, particularly for the benefit of parents and teachers.
- This approach pertains to all parts of speech, for example, nouns, verbs, adverbs, adjectives, etc. Therefore, lexical development of languages is expected to be complete and comprehensive.
- Minimal pronunciation changes may be adopted, and only to the degree and extent it makes sense, or is necessary to suit the phonetic system of the local or the non-dominant language.

- Minimal spelling changes may be adopted, and only to the degree and extent it makes sense, or is necessary to suit the writing system of the local or the non-dominant language. This concept is irrelevant where a totally different writing system is adopted.
- Wherever necessary, adaptation may be required to the extent it is needed to make foreign words fit into the local grammatical structure, for example, verbs which follow different conjugations or declination patterns in other languages. The usage and structure of verbs in Hindi is somewhat different from English, and French also widely varies from English. The latter has a particularly simple word structure.
- A uniform policy may be followed over a region for the sake of convenience, as far as possible in the interests of mutual intelligibility. This will be extremely important as word tend to be shared more over a smaller region than globally, or pan regionally.

VII. CONCLUSION

We had commenced this paper by emphasizing the importance of language policy and language planning processes, and had also probed and investigated its history in different contexts, particularly in the Indian one. We had then also referenced our previously published paper on the empowerment of linguistic have nots, a paper that we had published in 2023, and had attempted to present and propose some new and novel classificatory mechanisms of languages from the aforesaid perspective. We had also then reviewed the preexisting concepts of pedagogy, verbal intelligence, linguistic enculturation, linguistic ethnography, the Sapir Whorf hypothesis, linguistic workarounds and econolexia, and also reviewed and studied patterns of lexical development among individuals in different contexts, and in different parts of the world. We then interfaced these observations with first and second language acquisition patterns and theories as well. We ended this paper by debating and proposing various strategies for the lexical development of languages, particularly strategies for the lexical development of less dominant and future-ready languages. We accomplished this by studying different case studies and experiences drawn from real-time studies carried out and conducted in different parts of the world, particularly experiences from developing and relatively more poorly countries, and then drew inferences and generalizations there from. We anticipate that this would constitute an extremely important component of our globalization of science movement by boosting linguistic and economic performance of people in different cultures and different parts of the world, particularly those who lag behind or are otherwise underrepresented in science and economic development. This would therefore, we anticipate contribute to the tenth intellectual revolution, and lead to what we have always called "scientific progress at the speed of light".