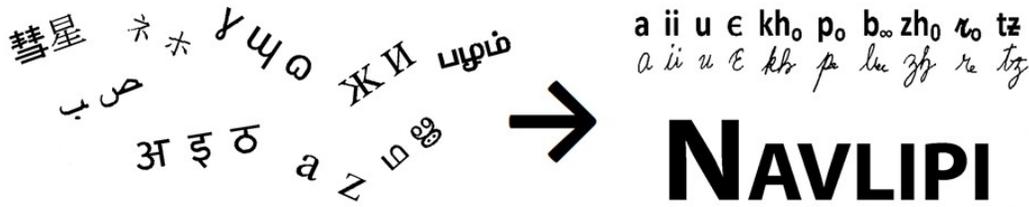


Books

## ABOUT THE NAVLIPI BOOKS



NAVLIPI: A New, Universal Script (“Alphabet”) Accommodating the Phonemic Idiosyncrasies of All the World’s Languages.

VOLUME I: Another Look at Phonic and Phonemic Classification: Navlipi.

Available as both an e-book and a print book

**Purchase Book**

### Brief Description of Book

This Volume I, the first book in the NAVLIPI series, presents a new, universal script, denoted NAVLIPI, capable of expressing all the world’s languages, from English and Arabic, to tonal languages such as Mandarin, to click languages such as !Xo Bushman. Based on the Roman script, NAVLIPI uses just five new or transformed letters (glyphs) in addition to the 26 letters of the Roman script; it uses no diacritics, rather making heavy use of “post-ops”, post-positional operators. Its expression is very facile and intuitive and highly amenable to cursive writing as well as keyboarding and voice transcription. More scientifically and systematically organized than even Hangul, NAVLIPI incorporates essential features of a universal script, thus far present in no world script to date, such as universality, completeness, distinctiveness, and practical phonemic application. It addresses the serious deficiencies of the alphabet of the International Phonetic Association. Most importantly, NAVLIPI addresses phonemic idiosyncrasy, for the first time ever in any world script; among other things, phonemic idiosyncrasy makes transcription, in the same script, of, e.g. Mandarin and English, or Hindi/Urdu and Tamil, extremely difficult. NAVLIPI also addresses the serious deficiencies of the alphabet of the International Phonetic Association (IPA) and may assist in the preservation of endangered languages. Volume I incorporates more than 620 detailed references in linguistics and related fields.

It is felt that NAVLIPI is introduced at an appropriate time for a globalized world, which needs a single script in which it is easy and intuitive to transcribe all of the world’s languages; it may also assist in the preservation of endangered languages.

Apart from presenting the new script, Volume I also presents a thorough review of nearly all prior art through five millennia to the present, a basic discussion of phonetic and phonemic classification, “exercises” in coming up with new scripts, a glossary of terms, and more than 620 detailed references in linguistics and related fields.

## More Detailed Description of Book

(Excerpted from PREFACE of Volume I)

NEED FOR A NEW SCRIPT AND “PHONEMIC IDIOSYNCRASY” : This book emanated from a direly felt need for a universal orthography (script, “alphabet”) capable of representing, systematically and scientifically, every phone (sound) and tone (musical accent, as in the Chinese languages) found in the world’s major languages; this is really a minimum requirement for any universal orthography. More importantly, however, it emanated from a need to address what was felt to be an even more urgent issue: The phonemic idiosyncrasies of the world’s languages. This book thoroughly addresses the problem of phonemic idiosyncrasy across language families, for the first time ever, to the best of published knowledge.

The term phonemic idiosyncrasy is defined and discussed in the introductory chapters of this book. However, we may define it very briefly here for the uninitiated reader, within the short space available in a Preface. Before we do, we must also very briefly define some other terms for the reader who may be uninitiated in the terminology of phonetics and linguistics: A phone is any sound, here specifically referring to human language. A phoneme is a phone with a linguistic value. A quick test for a phoneme vs. a phone is whether substitution changes the meaning of a word in a particular language. Thus, the phones [p] and [ph] are components of the same phoneme in English, designated /p/, since substitution of one by the other does not change meanings of words: E.g. in the word put, the p can be pronounced with ([ph]) or without ([p]) aspiration. However, [p] and [ph] are different phonemes in Hindi/Urdu, since substitution of one by the other does change the meanings of words, e.g. pal, “an instant”, phal “fruit”. In English, [p] and [ph] are said to be allophones of the same phoneme, /p/, whereas in Hindi/Urdu, they are distinct phonemes, designated /p/ and /ph/.

Phonemic idiosyncrasy can then be defined as the existence of very different sets (usually, pairs) of phones as allophones of the same phoneme in one language, whereas the same phones exist as distinct phonemes in another language. One example is that cited above: The bilabial stop [p] and its aspirated counterpart, [ph], are allophones of the same phoneme, /p/, in English, whereas they are distinct phonemes in Hindi/Urdu. Another example is the unvoiced and voiced bilabial stops, [p] and [b], which are allophones of the same phoneme in many Chinese languages. That is to say, one can say Beijing or Peijing, or pu or bu, without change of meaning, in a Chinese language like Mandarin. On the other hand, [p] and [b] are of course different phonemes in most Indo-European languages. E.g. in English, pet and bet have entirely different meanings. As yet other examples of peculiar allophones found in some languages, we can cite [x] (uvular/velar fricative) and [r] (trill), two radically different phones of modern French and German. Here, the first phone is a velar or uvular fricative and the second an alveolar tap or trill or semivowel. Nevertheless, these are part of the same phoneme in Parisian French and standard (Hochdeutsch) German; the [x] allophone is of course the famous “uvular r”. Other, even more illustrative, examples are the [v]/[w] and [f]/[ph] phone pairs of Hindi/Urdu. These are freely interchanged and have the same phonemic value, although they are obviously very different phones. That is to say, in Hindi/Urdu, one can say phal or fal and still mean the same thing, “fruit”, or varshaa or warshaa, and still mean “rain”.

As this book notes in detailed discussions, there are two potentially very different views of phonemic idiosyncrasy:

That phonemic idiosyncrasy is indeed a unique phenomenon, as exemplified by the many allophonic examples cited above: The prominent [p]/[ph] allophones of English vs. their clear phonemic distinction in Hindi/Urdu; the prominent [v]/[w] and [f]/[ph] allophones of Hindi/Urdu vs. their phonemic distinction

in nearly all other world languages; and the [x]/r allophones of modern French and German. While the first (English) example is only somewhat odd, the latter two (Hindi/Urdu, French/German) examples are truly idiosyncratic!

That there is in fact no such thing: What appears to be phonemic idiosyncrasy is simply the total absence of certain phones in certain languages. This may at first glance appear to apply to some languages. For example, the [p] of the bilabial [p]/[b] pair can be said to be simply absent in standard Arabic, the [l] of the [l]/[r] pair can be said to be simply absent in Japanese, and the aspirated stops such as [ph] and [th] can be said to be simply absent in Tamil. However, the English, Hindi/Urdu and French/German examples in (1) above clearly refute this view.

The discussions in the book seek to clearly show that #1) above is correct and #2) is wrong. This is done, e.g., by citing examples from such common languages as English, and showing that, where one phone is supposedly absent in a certain language, it is invariably mistaken only for its allophonic counterpart from another language and no other phone.

Why phonemic idiosyncrasy across languages is a serious problem with respect to a system of writing can then be easily appreciated: The expression of phonemic idiosyncrasy across languages must somehow be incorporated into and accommodated by a single writing system, a universal script. For example, an English speaker, when reading Hindi/Urdu in the universal script, should be able to immediately comprehend that the phone [v] can also be pronounced as a [w] although when reading English in the same universal script, [v] and [w] are pronounced quite differently. Similarly, a Hindi/Urdu speaker should immediately be able to comprehend, when reading English in the same script, that [p] and [ph] have the same value in English, unlike the case in his/her own language. An English speaker, when reading Arabic in the same script, should immediately be able to understand that [p] and [b] are not separate phonemes in Arabic, and such bilabial sounds are usually, but not always, pronounced as [b], the [p] being absent in most (but not all) Arabic dialects. Etc. etc.. The universal script must contain and be able to convey this information.

We can briefly cite one example of how Navlipi addresses phonemic idiosyncrasy, with the English phoneme /p/. Navlipi uses the [o] (subscripted circle postpositional operator, "postop" for short), to represent the combined (aspirated + unaspirated) phoneme. This postop is very amenable to cursive writing as well as keyboarding, yet very distinct and recognizable. This postop then gives us three sets of glyphs (letters or symbols) for the components of the English phoneme /p/: [p] (unaspirated phone); [ph] (aspirated phone); and po (aspirated/unaspirated combined phoneme but generally pronounced [p]). Navlipi calls [po] a phonemic condensate. That is to say, the [p] and [ph] phones are said to be condensed into one phonemic condensate, po, which is equal to [p] + [ph]. In Navlipi transcription, only the po would be used for English, i.e. all letters p would be written as po. Thus, the words spy and put would be written spoy (actually, spoae !) and pout respectively.

The book also notes that phonemic idiosyncrasy is a subject that has, to the best of published knowledge, never been addressed by any world script to date. There is as yet no world script that transmits information of phonemic idiosyncrasy of a language to the reader. For example, reading Mandarin transcribed in virtually any world script, one would not receive the information that voiced and unvoiced phones, [b] and [p] are actually phonemically equivalent and may be mostly interchanged without change of meaning of a word; or, again, that the "r" of French can be pronounced as [r] or as [x], the latter used in Parisian French, without change of meaning of a word.

Additionally, all scripts produced in the world to the present time, including that of the International Phonetic Association (IPA), suffer from other serious drawbacks as well. They typically lack in one or

more of the important requirements of a universal orthography, such as universality, distinctiveness, recognizability, and ease of keyboarding or cursive transcription, to name a few. Such prior art is extensively and very comprehensively discussed in this book.

**OBJECTIVES SET FORTH IN THIS BOOK FOR A UNIVERSAL ORTHOGRAPHY:** This book set for itself the following major requirements for a universal orthography:

1. Universality and completeness.
2. Recognizability.
3. Distinctiveness: Distinguishability of one letter of the script from another, especially those representing related phones.
4. Simplicity and intuitive nature. Simplicity is also reflected in ease of learning.
5. Ease and rapidity of transcription from three points of view: keyboard, cursive, and print. High amenability to cursive writing.
6. Systematic, scientific classification and accuracy.
7. Discretization.
8. Practical phonemics rather than phonics. A fundamentally phonemic system. Thus, e.g., while some scripts (e.g. the IPA) can be used to transcribe the different pronunciations of two individuals speaking the same language, that was not the objective of Navlipi.
9. Voice-recognition compatibility and a voice-recognition software package.
10. And of course, most important of all, the ability to accommodate the phonemic idiosyncrasies of all the world's major languages.

The book devotes an entire chapter to the discussion of prior art, in which it is attempted to demonstrate that all prior scripts are deficient in meeting at least three of the above objectives. For example, in discussing at length the gross inadequacies of the “alphabet” of the International Phonetic Association (IPA), some of the many deficiencies pointed out are the lack of recognizability and distinctiveness: For example, some of the IPA’s letters/symbols appear straight from outer space, and many of the inverted, rotated and angled r’s, a’s, e’s etc. are mutually very confusing. Another of the many deficiencies of the IPA cited is the lack of ease of use and intuitiveness: For example, reading the tone symbols almost requires a cipher, with constant referral to the IPA chart, even for an expert. Thus reading an IPA transcription of Cantonese is a nightmare. And of course, the IPA does not even remotely address phonemic idiosyncrasy.

Intimately related to the above objectives are the arguments against a new, universal orthography, discussed at length in this book. Some of these have much merit, but Navlipi nevertheless assumes that the arguments for far outweigh arguments against.

The first two objectives above (universality/completeness and recognizability) almost mandate a script based on the Roman: Whether one likes it or not, a reality today is that the Roman script is the most recognizable the world over. Needless to say, Navlipi is of course based on the Roman script.

Navlipi also has a prominent cursive writing component. It thus assumes that handwriting will still be used by humans in the future. This is another big gamble taken by Navlipi: As discussed in the book, even as of this writing (2005), scientists have succeeded in implanting chips in human brains that enable paralyzed people to control cursors etc. simply by using their thoughts. By extension, then, such methods could eventually be used for a direct thought-to-orthography system, without the intervention of handwriting or voice communication! (Incidentally, the term “cursive writing” is intended to include the quick, unjoined, semi-print handwriting used by keyboard-accustomed kids these days.)

**AUDIENCE ADDRESSED:** Navlipi is humbly addressed not just to situations ripe for its use, one of the most important of which is a common script for India that bridges the “Aaryan(Aryan)/-Dravidian” (North/South) divide. This divide (see PRIMER and INTRODUCTION parts) is a prime example of the problems associated with transcription, in the same script, of phonemic idiosyncrasy between languages. Rather, Navlipi also humbly seeks to address itself to existing Romanized transcriptions which are still not entirely adequate. Examples of these include, but are not limited to, Swaahili (Swahili), Vietnamese, Indonesian/Malaysian (the main Bahasa), Turkish, and the Romanized Mandarin (pinyin); the latter was vigorously promoted by the Chinese government many decades ago. And finally, Navlipi also seeks potential new markets, such as the Turkic languages of the new Central Asian republics. These were originally transcribed in Arabic script, then in Cyrillic under the Soviet Union. Now, many are seeking a Romanization based on the Turkish. With respect to China, it is well recognized that modern China has adapted its ancient ideographic script well to the 21st century. For instance, even computer operating systems such as Windows and Mac OS are entirely in Chinese characters. One might say then that there appears to be absolutely no need for the Roman script in everyday life in China, except when interfacing with non-Chinese. There is also a certain degree of unity that this common ideographic script provides for the Chinese languages. Nevertheless, many of today’s Chinese in the science and literature fields express a desire for a more easily learned and palatable, “Romanized” script, saying that ideographic Chinese is a handicap in intellectual discourse. In earlier times, it was also considered a handicap to universal literacy, since basic literacy required the learning of at least 2,000 characters, and “educated” literacy at least 20,000 characters.

Thus, in a sense, India and China, the two most populous countries in the world today (2005), and, potentially, economic powers of tomorrow, represent the two largest potential markets for Navlipi. Apart from these, there is of course also the hope that, if a truly capable universal script catches on, it could eventually replace the Cyrillic, the Arabic, the Chinese, the Hebrew, etc.. It could also be used where the Roman script does not do all that well, e.g. for the Slavic languages that use it (Czech, Slovak, Polish, Serbo-Croat, the latter recently further divided into Croatian, Serbian, Bosnian, etc.). On the other hand, this author fully appreciates that attempting to replace existing ways of doing things (here, scripts), is a daunting task, and may be unsuccessful. In this context, replacement of an existing script would make the problems encountered with present (2005) attempts at replacing Microsoft Windows with Linux pale by comparison! As far as initial propagation in a country such as India, Navlipi could perhaps be taught alongside the local script, but not replace it: Kids would learn, along with their standard “ka kha ga” (“ABC”), the Navlipi equivalents. Books might initially be printed in both scripts. This may be a start for Navlipi in India. In China, initially, the new script might be taught wherever the Romanized script is still taught, with the hope that it would catch on from there.

**LEVEL OF THE BOOK, FOUR (4) PARTS OF THE BOOK AND THIS BOOK BEING THE FIRST IN THE NAVLIPI SERIES:** The present book, called BOOK 1 for convenient reference, is the first volume in a three-part NAVLIPI series. In an effort to attract and address as wide a readership as possible, the book is written at an extremely basic level. It has a somewhat peculiar organization. For example, to start with, it includes several initial chapters, collectively entitled INTRODUCTION, which discuss the need for Navlipi, and its objectives, as well as other prior art. A complete Glossary of all phonetic, linguistic and grammatical terms is also included (this Glossary even defines “orthography”!). Due to the above organization, there are then four main parts to this first volume in the NAVLIPI series:

**PART 1** comprises the SUMMARY TABLES of Navlipi, akin to the “Chart” that summarizes the alphabet of the International Phonetic Association (IPA), in the IPA’s main publication. It also includes transcriptions into Navlipi of languages as diverse as Vietnamese and Maraathi (Marathi), apart from the five most widely spoken/understood languages in the world as of 2005 (in decreasing order, Mandarin, Hindi/Urdu, English, Spanish and Arabic).

**PART 2** comprises the INTRODUCTION chapters, which discuss the need for Navlipi, its objectives, and other prior art.

**PART 3** comprises the “meat” of the book, and encompasses a detailed discussion and presentation of Navlipi.

**PART 4** includes a Glossary, Literature Cited, Index and the About The Author section.

A useful offshoot of the teaching of Navlipi in its innate, “alphabetical” order is that this will also comprise a complete lesson in phonetics, in phonological classification, and in phonemic condensation. This, minus the phonemic condensation, is in fact just as it is for the present-day Indian scripts.

While the inclusion of chapters with subtitles such as “Other Prior Art” is understandable in a book of this nature, the reader may ask why certain other chapters are included as well. The answer is that these other chapters are included simply for completeness: To keep the reader as thoroughly informed as possible in discussions which may touch upon these subjects. Without this completeness, this author felt that the book might not be fully appreciated by a lay reader, and its impact thus lessened.

**POST-OPS, OTHER NEW TERMINOLOGY, NUMBER OF NEW GLYPHS (LETTERS OR CHARACTERS):** Navlipi uses post-ops (post-positional operators) extensively. Thus,  $h^{\circ}$ , and  $h_0$ , both distinct from the letter h (the glottal fricative), are the post-ops, respectively, for aspiration (as in [k<sup>h</sup>o]), and fricativization; both these post-ops are easily and distinctively rendered in cursive as well. Tones are also represented as post-ops; these are designed in a special way to be both intuitive and extremely easy to render in cursive. This thus avoids the heavy use of diacritics found in almost all Roman tone transcriptions, from Vietnamese to Roman Mandarin to the IPA.

The use of (just a few) post-ops also considerably reduces the number of keyboard keys required. For example, the letter z (~~z~~ with strikethrough) is used as the post-op for ingressive clicks. Using it, all ingressive clicks can be written, obviating the need for individual keys for each click. Thus, e.g., the lateral, “giddyap” click is written lz .

An additional, important result of the use of these few post-ops is that Navlipi needs very few new glyphs (letters) outside the standard Roman script. To be precise, Navlipi uses: Just one borrowed glyph (Greek omega, phone #<sub>33</sub>(4) in Navlipi matrix notation); just one entirely new glyph (for the medio-palatal, unvoiced, unaspirated stop, phone #<sub>1-6</sub> in Navlipi matrix notation); and just three transformed glyphs (an inversion of the Roman c for the tongue-front-central, lips-stretched, jaw-open-position vowel, as in English Jack, denoted #<sub>1(1)</sub>(4) in Navlipi matrix notation; a variant of the Roman j for the palatal, voiced, unaspirated stop, Navlipi phone #<sub>(3-7)</sub>; and a variant of the Roman g for the uvular, voiced fricative, Navlipi phone #<sub>(7-3)</sub>). This makes for a total of just five (5) new or transformed glyphs (letters) in Navlipi.

Besides the term “post-op” cited above, Navlipi introduces many other new terms along the way. These include, e.g., phonochromaticity, artition, forward-fricative and galatophone, and the all-important phonemic condensate. Most of these terms are self-explanatory. Thus, phonemic condensate quite obviously connotes the condensation of two or more phones into a single phoneme peculiar to a particular language and represented by a separate glyph or post-op. As an example, the post-op [ $\frac{1}{5}$ ] (subscripted infinity sign) is used to represent the [voiced + unvoiced] phonemic condensate, found e.g., in the combination of the (voiced + unvoiced) bilabial stops in Mandarin. This is then rendered as  $b^{\frac{1}{5}}$ , indicating that it is a combination of ([p] + [b]) that is usually but not always articulated as [b].

**KEYBOARDING IN NAVLIPI:** The very simple, intuitive and “natural” keyboard rendition of Navlipi is dealt with at length in this book, in PART 1 as well as in a later, separate chapter devoted solely to this

subject. Navlipi uses common Roman keyboards, such as the American QWERTY or French AZERTY, with minimal modification.

As a first premise, Navlipi starts with language-specific keyboards, much like “sub-fonts”. This greatly minimizes the need for new keys. For example, for English, the “p” key would print as po, indicating the ([p] + [ph]) phonemic condensate; however, for Hindi/Urdu or Spanish, it would print just as p (the unvoiced, unaspirated bilabial stop only). Similarly, (ALT + k) would print as kho (velar unvoiced, aspirated stop) in Hindi/Urdu but k.. (uvular unvoiced stop currently rendered as q) in Arabic. These examples represent three of the many keyboards of Navlipi (here for English/West-European-Languages, Hindi-Urdu/-Spanish/-Russian/-Indonesian... and Arabic, respectively). In the Hindi-Urdu/Spanish-etc.. keyboard, the “r” key prints as r, indicating the alveolar tap/flap/trill phonemic condensate. However, in the English/etc.. keyboard, it prints as ro, indicating the alveolar semivowel only, since English doesn’t use trills.

The keyboarding is platform-independent. It is also carried out so that there are no conflicts, e.g. with common CTRL keys used in most word processors (e.g. (CTRL + c), “copy”) and UNIX-based operating systems such as LINUX. The (SHIFT + number) keys are also freed up cleverly, so that they are available for the tone post-ops; these tone post-ops are again language-specific for major language groupings (e.g. Mandarin, Cantonese, Yoruba, etc.). Cosmetic modifications include a smaller spacebar key and larger ALT keys, to maximize use of the latter with forefingers. The most common post-ops are assigned common keys, although they may be rarely used in the language-specific keyboards.

**SCOPE OF THE WORK:** The author humbly notes that a single-author work such as this can only be a first basis, a guide for future work. As such therefore, it was his intention only to provide a maargadarshan (a Maraathi, Hindi and Sanskrit word somewhat poorly translated as “direction for the way ahead”) in devising a new, universal script. The work would thus, hopefully, be refined further by others. A single-person work perhaps cannot, ultimately, compete with the work of a team of savants in the field.

**THE NAME “NAVLIPi”:** The name Navlipi of course means “New Script” in Sanskrit and all the major North Indian languages of today, and, through borrowing, Tamil and the other major Dravidian languages of South India. Coincidentally, it is also one of the many words whose transcriptions in Roman script and in Navlipi script are very close! (A more accurate transcription is “Navalipi” in Roman script and “Navwqlipi” or “Navwlipi” in NAVLIPI script for Hindi/Urdu, but that point is academic!)

**HISTORICAL NOTE:** On a personal note, the Navlipi script portion of this book was completed in substantially its present form in the summer of 1982, when the author had a hiatus between research advisors in graduate school in his main field of study (chemistry), in Buffalo, New York, USA. It was reworked on somewhat in the summer of 1991, but for the most part lay in his attic until he resolved, in Spring 2003, that it must see the light of day. Sporadic work thereafter (a few days in this month, a few days in that month), constrained by the responsibilities of the author’s regular, bread-winning occupation, has finally brought it to light and to this publication. The delay since 1982 may however have been beneficial, since the new aspects addressed since 2003, such as advanced keyboarding and voice recognition, would not have been possible in 1982. Additionally, the book may not have been able to foresee, and thus take into consideration, the very rapid demise of cursive writing, and indeed handwriting in general, that we are seeing at the time of this writing (around 2005). It may not also have been able to foresee the potential development of direct thought-to-final-transcription technology (whether paper or screen). This is already implemented as of 2005 with a brain chip implant for handicapped persons. This perhaps foretells the demise of writing, keyboarding and all other physical methods of transcription altogether in the not too distant future!

## Full TABLE OF CONTENTS from Volume I

### TABLE OF CONTENTS

FOREWORD/APPRECIATION.....	xxiii
by Nicholas Ostler	
Author, most recently, of <i>The Last Lingua Franca: English Until the Return of Babel</i> (Walker & Company, 2010); Author of <i>Empires of the Word: A Language History of the World</i> (Harper Collins, 2005); and of several other works in the fields of language and linguistics.	
FOREWORD.....	xxv
by Christopher Moseley	
Editor-in-chief of <i>UNESCO Atlas of the World's Languages in Danger</i> (UNESCO Press, 3rd Edition, Paris, 2010- includes online interactive version); Editor of <i>Encyclopedia of the World's Endangered Languages</i> (Routledge, 2007); Co-Editor of <i>Atlas of the World's Languages</i> (Routledge, 1994); of <i>Foundation for Endangered Languages</i> , London, U.K., <a href="http://www.ogmios.org/">http://www.ogmios.org/</a>	
PREFACE AND OBJECTIVES OF THIS BOOK.....	xxxi
PART 1: THE NAVLIPI SUMMARY TABLES.....	1
PART 2: INTRODUCTION.....	163
CHAPTER 1. NEED FOR A NEW SCRIPT AND “PHONEMIC IDIOSYNCRASY”.....	165
CHAPTER 2. OBJECTIVES SET FORTH FOR A NEW SCRIPT, HOW NAVLIPI MEETS THESE OBJECTIVES, AND ARGUMENTS AGAINST A NEW, UNIVERSAL SCRIPT.....	177
CHAPTER 3. OTHER PRIOR ART.....	193
PART 3: PRESENTATION AND DISCUSSION OF NAVLIPI.....	287
CHAPTER 4. THE FULL PHONIC CLASSIFICATION OF NAVLIPI: THE “SHELL” MATRICES (TEMPLATES).....	289
CHAPTER 5. PRELUDE TO NAVLIPI: EXERCISES IN PHONIC CLASSIFICATION, OR “LET’S TRY TO MAKE A NEW SCRIPT”. (FILLING IN THE TEMPLATES PRODUCED IN THE PREVIOUS CHAPTER).....	323
CHAPTER 6. SUMMARY OF ALL POST-OPS USED IN NAVLIPI.....	351
CHAPTER 7. PRESENTING THE FULL, PHONIC NAVLIPI SCRIPT, INCLUDING A DISCUSSION OF REASONS FOR SELECTION OF ITS GLYPHS (LETTERS).....	375
CHAPTER 8. TONES, TONEMES AND ICTUS (STRESS) ACCENTS.....	401
CHAPTER 9. PHONEMIC CONDENSATION AND CLASSES OF PHONEMIC CONDENSATES USED IN NAVLIPI.....	427

CHAPTER 10. NAVLIPI KEYBOARDING USING THE QWERTY, AZERTY OR OTHER COMMON KEYBOARDS.....	439
PART 4: GLOSSARY, LITERATURE CITED, INDEX, ABOUT THE AUTHOR.....	493
GLOSSARY.....	495
LITERATURE CITED.....	507
INDEX.....	565
ABOUT THE AUTHOR.....	575

# NAVLIP: A New, Universal Script (“Alphabet”) Accommodating the Phonemic Idiosyncrasies of All the World’s Languages.

## VOLUME II: Navlipi Companion: A Primer in Linguistics, Phonetics, Phonemics and Writing Systems with a Difference.

Available as both an e-book and a print book

**Purchase Book**

### **Brief Description of Book**

This Volume II is a companion to Volume I, which presented the new NAVLIP script.

It is, as its title says, a “Primer with a Difference”. It attempts to provide a wider foundation for the subjects that a new universal script such as NAVLIP must deal with, while also attempting to educate a layman in such closely related yet diverse fields as phonetics, phonemics, basic linguistic concepts and language families of the world. This task is done all “under one roof”, as it were, and at a very basic level; to the best of published knowledge, this has not been done before. For example, the “tree diagrams” of language families, which attempt to combine temporal, linguistic-cognacy and other properties of language families in one figure, are useful summaries in a single format.

As such then, this Volume attempts to be one of the most complete and in-depth linguistics, phonetics and phonemics primers in a single work to date.

This Volume II is however not just a compilation of existing knowledge. It also introduces many new concepts and new terminology, examples being forward fricative, phonochromaticity, phonemic condensate, and self and not-self, the latter two being terms borrowed from immunology. It discusses new concepts on the origin of language. It presents one possible, hypothetical parent language, dubbed Anti-Nostratic, reconstructed from infant phonemes that are common across language families. It applies the most recent (to 2007) DNA studies to discussions of migration and language origins.

Finally, this Volume II also contains exercises at the end of each chapter to facilitate teaching, a glossary of terms, and more than 620 detailed references in linguistics and related fields.

### **More Detailed Description of Book**

This book, the second volume in the NAVLIP series, comprises a companion volume to the main and first NAVLIP book (Vol. I), which presented the new NAVLIP script.

This, second volume is, firstly, intended for completeness: It attempts to provide a wider foundation for the subjects that a new phonic and phonemic classification and script, as presented in the first NAVLIP volume, must deal with. It attempts to keep the reader as thoroughly informed as possible in discussions which may touch upon these subjects. Without this completeness, this author felt that the NAVLIP script might not be fully appreciated by a lay reader, and its impact thus lessened.

One of the primary objectives of this second volume is pedagogical, attempting to educate a layman in such closely related yet diverse fields as phonetics, phonemics, basic linguistic concepts and language families of the world. To the best of this author’s knowledge, this has heretofore not done before “under one roof”, as it were, i.e. in a single volume; such a single source at an introductory level is still

directly lacking, in any language. Furthermore, even the separate sources that do provide such introductions, such as some of the references cited in this volume (see Chapter 1), frequently do so, in this author's opinion, in a somewhat cursory and superficial fashion. The present volume presents these subjects in a unique fashion, from first principles, as it were, an approach not found, again to the best of the author's knowledge, in any primer or elementary volume in the English-language and West-European-languages world. It thus attempts to present, again to the best of the author's knowledge, the most complete linguistics, phonetics and phonemics primer in a single work to date.

However, this volume does not just attempt a compilation of existing knowledge. It also presents some new and unique concepts and introduces new terminology. Hence the qualification in its title, ... A PRIMER ... WITH A DIFFERENCE.

Examples of entirely new concepts presented for the first time that are also associated with new terminology are galatophone, forward fricative, phonemic condensate, maatraic and vaigyaanic. Examples of terminology or concepts resuscitated from ancient texts are the terms phonochromaticity and phonochrome, or the concept that the verb rather than the substantive (i.e. noun, pronoun, etc.) may be the fundament of language, i.e. the grammatical form first invented when language developed (as always insisted upon by the ancient Indian grammarians), although a layman and even experienced linguists might intuitively favor the substantive as the first form, perhaps visualizing a caveperson first calling out and naming objects that he or she saw!

Among other entirely new concepts presented for the first time are derivation of a putative, pre-historic parent language, dubbed the Anti-Nostratic, from infant phonemes in progressively older infants which appear to be common across all the world's language families. In the context of this discussion of a putative parent language derived from infant phonemes, another important concept, that of self and not-self (terms borrowed from immunology), is introduced.

Another new concept presented in detail for the first time is the concept that language is simply the outward manifestation of an increased human intelligence and that the vocal apparatus and genes associated with it (e.g. the FOXP2) are merely incidental to language: In their absence, some other form of linguistic expression, such as thigh slapping, may have evolved, with all the grammatical complexity of the most complex inflected language of today; the very recent development of the children's Nicaraguan Sign Language and the adults' Arabic Sign Language are discussed in this context. The tendency of languages to naturally develop greater order, and, ultimately, highly inflectional character, when left in linguistic isolation, is also discussed in the context of its relation to concepts of increased or decreased entropy in isolated and un-isolated systems, borrowed from thermodynamics.

Chapter 1 commences by attempting to give the lay reader an extremely thorough grounding in phonetics and phonological classification. Chapter 2 attempts to lucidly discuss methods and systems of writing in great detail, attempting to condense what may be found in several hundred pages in extant texts into a single chapter. It also introduces some new concepts and terminology, and has a detailed discussion on the tools available for the modern orthographer attempting to devise a new script (such as NAVLIPI), e.g. transformed letters, diacritics, multigraphs, line position, post-ops and pre-ops. Chapter 3 further develops phonological classification and again introduces a few new concepts and terms. Chapter 4 discusses language families in great detail. Chapter 5 discusses grammar, order and structure in language, again in great detail.

The book also attempts to present much more depth and detail than found in extant primers and elementary texts. For example, in the chapter on the world's major language families, along with the usual detailed discussion, it also depicts languages and language families in a unique, graphical way that

clearly relates the temporal (time-based) relationship of the languages and their parents, their relative affinity or cognacy, and the extent of influences from unrelated languages and language families, all in one 2-d graph. As another example from this chapter, the controversy of whether to consider Japanese as a language isolate or to group it with the Altaic family, and, going beyond this, whether the old appellation "Ural-Altaic" still has significance, is dealt with in great depth, yet in just a few paragraphs. Again in this chapter on language families, the subject of the original provenance of the Dravidians and their language family (i.e. whether native to northern and central India or migrants from the Iran-Iraq region), on which so much light has been shed by very recent (last 10 years) DNA studies, is again dealt with in a short space but in great depth. In this regard, maps of possible Aaryan (Aryan) - Dravidian interactions in the context of the end of the last Ice Age are also presented.

The chapter on grammar will give the lay reader a very clear understanding of such concepts as all possible attributes of verbs (number, gender, tense, mood, voice, animation, etc.) and of substantives (three numbers, three genders, 10 cases, etc.), and the forms and typologies of languages. Clear understanding of these is otherwise very difficult to acquire, even from perusal of multiple texts in these subjects.

A final caveat is to be noted in the context of what this second volume in the NAVLIPI series seeks to achieve: While it attempts to treat diverse but closely related subjects such as phonology, linguistics and language families "under one roof" as it were, that is to say in a single source, it cannot be expected to be as detailed as single texts dealing with each of these fields or their sub-fields individually. As noted at the outset of Chapter 1, many such texts may be recommended. Detailed citations to these are given. To cite just a few in the English language only: The widely circulated books by O'Connor [Ref. #PHo-1 in the book], Aronoff / Rees-Miller [Ref. #LN-1], Daniels/Bright [Ref. #SCr-1] and others; the general and specialized works by prominent authors in the linguistics, phonetics, orthography, and related fields, from Panini (Paaninii) to Sapir, Bloomfield, Jespersen, Malmberg, Misra, and Chomsky [Ref. #s LN-31 to 41]; and several detailed monographs, textbooks and reference works which may be hard for the lay reader to peruse [Ref. #s LN-1 to 30, PHo-1 to 20, SCr-1 to 20].

## Full TABLE OF CONTENTS from Volume II

### TABLE OF CONTENTS

FOREWORD/APPRECIATION TO VOLUME I.....	xv
by Nicholas Ostler	
Author, most recently, of <i>The Last Lingua Franca: English Until the Return of Babel</i> (Walker & Company, 2010); Author of <i>Empires of the Word: A Language History of the World</i> (Harper Collins, 2005); and of several other works in the fields of language and linguistics.	
FOREWORD TO VOLUME I.....	xvii
by Christopher Moseley	
Editor-in-chief of UNESCO Atlas of the World's Languages in Danger (UNESCO Press, 3rd Edition, Paris, 2010- includes online interactive version); Editor of <i>Encyclopedia of the World's Endangered Languages</i> (Routledge, 2007); Co-Editor of <i>Atlas of the World's Languages</i> (Routledge, 1994); of <i>Foundation for Endangered Languages</i> , London, U.K., <a href="http://www.ogmios.org/">http://www.ogmios.org/</a>	
PREFACE AND OBJECTIVES OF THIS SECOND VOLUME.....	xxiii

CHAPTER 1.

ORIGINS OF LANGUAGE; POINTS OF ARTICULATION; BASIC CLASSIFICATION OF VOWELS, NONVOWELS, TONES.....1

CHAPTER 2.

WRITING: METHODS OF TRANSCRIPTION AND “ALPHABETS”.....53

CHAPTER 3.

PHONOLOGICAL CLASSIFICATION AND SOME NEW PHONOLOGICAL TERMS.....87

CHAPTER 4.

THE WORLD’S MAJOR LANGUAGE FAMILIES- A PRIMER.....113

CHAPTER 5.

GRAMMAR AND GRAMMATICAL TERMS, THE FORM OF LANGUAGE, ORDER IN LANGUAGE, AND POSSIBLE STRUCTURE OF A SINGLE, PARENT HUMAN LANGUAGE, THE “ANTI-NOSTRATIC”.....261

APPENDIX (TABLE 5-8). ILLUSTRATION OF EXTREME INFLECTIONAL CHARACTER IN A LANGUAGE: PARADIGMS FOR CONJUGATION OF THE SANSKRIT VERBAL ROOT -wid- (-vid-) IN THE 2nd, 4th, 6th, 7th and 10th CONJUGATIONS, IN ACTIVE AND MIDDLE VOICES [ Table 5-8 (appended here due to its length) ].....311

GLOSSARY.....343

LITERATURE CITED.....355

INDEX.....413

ABOUT THE AUTHOR.....429