

The Global Safari¹

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The alphabet is so well-known to us all, ever since first grade, that surely we know everything that can be known about it, and nothing new can be said about it. But this is exactly what we will do here, for the Global Alphabet is an innovative way of looking at alphabets, an innovative interpretation or theory of how alphabets work.

Teachers of foreign languages (FLs) including English as a FL (of all of which I have been a teacher and teacher-trainer), desperate to give their students a key to the challenge facing them, often teach the alphabet song. But the alphabet song can't be used to order a meal or make a new acquaintance. Nicely small and linear as it is, it is not the language, because its letters have no meanings, being just signs for sounds. At least all this seems to be true for the linear alphabet. But **the Global Alphabet is different**, consisting of **Key-letters** that have **meanings**.

Octopi.

The claim here is that the meanings of these “Key-letters” are revealed in “octopi”: sets of words with the same Key-letter, in one or more languages. When the English translations have the same Key-letter, this letter is capitalized (as are Key-letters in all examples), and part of the octopus.

An L-octopus in English and other languages.

English		Spanish	German	Russian	Hebrew	
<i>Leg</i>					^o <i>aLeh</i>	Lift
Limb	word	<i>Lengua</i>	<i>Leffel</i>	<i>Lozhka</i>	<i>Lashón</i>	tongue,Language
Lip	meaning	tongue,Language	Spoon	spoon	^o <i>aL</i>	up, upon
Lift				<i>Leta-</i>	^e <i>L</i>	God
Lofty				fly	^e <i>Lyón</i>	on high
Ladle						
Load						
Label						

The octopus is not a set of parallel whole words in different languages, but a set of words sharing their Key-letter, and related in meanings. Confirmation of the general approach comes from additional words, beyond the octopus. For example, *Love* is a metaphoric extension of *L*, because Love Lifts one up. Hebrew has *Lev* ‘heart,’ which might be a good true parallel if Hebrew and English were genetically related, but they are not, so the only connection is the shared Key-letter *L*.

Whole-word parallels would show languages to be genetically related, for example English *Mother* and Spanish *Madre*. Because the words in an octopus share only the Key-letter, and are not completely parallel, they instead hint at nothing more or less than the existence of the Key-letter, in this case *L*. The hypothesis is that *L* as a Key-letter means LIFT, or LOFTY, or ‘high,’ or objects on top, or instruments for LIFTing. —in literal and metaphoric meanings, and various other semantic extensions, displaying a sort of history of meaning in the given languages.

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Among the implications of the Global Alphabet is that it reveals connections within and between languages that have been **hiding in plain sight**—sometimes for many centuries. One example is the similarity between the Polish and Israeli airlines: Polish *Lot* ‘means ‘flight’ and Israel’s “*eL-aL* means ‘up-to above,” all sharing *L* meaning LIFT,² JUST Like *Lev/Love*.

Without any knowledge of the Global Alphabet, the proverbial Man in the Street may well think that sound-symbolism plays a large role in language—unless he knows more than one language. Thus he may think that *Bow-wow* **sounds like a dog**, unless he knows that the Chinese use *Wang-wang* for dog barking. *Cock-a-doodle-doo* (*kukuriku*) is more universal, and might even be recognized by roosters, while neither *Bow-wow* nor *Wang-wang* is likely to be understood by dogs. The speaker of a language might even think that the name of the animal in his language sounds like the animal e.g. that the noun *Cock* actually is derived from *Cock-a-doodle*—and in this case he may be right!

Sound-symbolism (onomatopoeia) is part of pre-linguistic “heresy” of “phonosemantics,” in which, e.g. the vowel *i* was said to be associated with smallness, and *o-* and *a-*vowels with largeness—a good enough “theory” for *large* vs. *little*, but not too good for *big*, *small*. These examples show how difficult it is to investigate meaning by simply looking at words (and even more, word parts: morphemes and sub-morphemes) and asking what they mean. Along with simple octopi, therefore, it is better to use an indirect strategy, avoiding the question of just what letters mean until we have established a plausible case for such a general idea altogether. Direct observation is rarely reliable in science (especially human sciences), and meaning is no exception. Meaning is more easily observed indirectly, by asking whether words *X* and *Y* have the same meaning, rather than asking what *X* means by itself. Bilingual dictionaries use this trick, equating words with their translations across different languages.

So along with presenting direct claims about Key-letters and their meanings, this article will present a form of what is called, in engineering, a “design of experiment” (DOE). The general point of this method is to isolate and define the specific parameters of the envisaged “whole” experiment. We will thus partly sidestep the question of what words (and hopefully letters) mean by using instead the idea of two words in different languages being accurate translations of each other. By thus outlining an envisaged experiment, we can find a small number of representative points in the multi-dimensional space of the empirical domain, which may suggest a general idea with a power going far beyond their literal extent. The idea is like getting a sufficient sampling of pixels from various well-chosen, representative spots as to suggest the whole picture somewhat definitively.

So let’s assume two languages, *A* and *B*, each with 20 letters in its alphabet, and up to 50 words beginning with each letter. We will thus be asking the question of how many words with the same initial letter are translations of each other. Of course we need a base-line, an estimate of how many such words would match by pure chance. The goal here is to rule out coincidences, including clusters of coincidences which of course do occur randomly.

By pure chance, we would expect, I understand,³ an average of 1.9 shared words belonging to each letter of the alphabet. Obviously the *L*-octopus shows more than two words, and it could be amplified fairly easily in these and other languages, especially when non-paired words like *Love* and *Lev* are included, not as paired with each other, but as independent extensions of the Key-letter.

Two questions might be posed even now, to check whether I am displaying real results, or perhaps cherry-picking examples. We can in fact continue outlining the DOE. further by exploring further parameters, on the analogy of an MRB (Material Review Board), which is tasked with discovering defects in production in Quality Control in engineering. Of course our task here is in a sense the opposite, since the greater-than-expected frequencies of shared Key-letters are not production bugs; on the contrary, they are interesting anomalies in search of an explanation—if they pan out.

Which letter of the word?

Why the first letter and not the last or middle letter? In fact, the *L*-octopus may not seem to conform to the rule because initial vowels are ignored. Instead of the first letter, the octopus focuses on the **first consonant letter**. Is this “fair,” or just a trick that I have used to make the data look more convincing?

² Thus *up* is used here for arriving, as in *uP the street*, in which the *P* literally means ‘forward’ (*PUSHY P*).

³ from Joshua bar-Lev.

the research.

The Global Alphabet started as research on a single language. Modern Transformational-Generative linguistics similarly began with English alone; even now, no language has been studied as extensively as English. Even today, there is reason to be suspicious when new sub-theories are presented on the basis of a language that no one but the researcher knows—although it is assumed that any language sheds its own light on the universal structure that all languages partake of, although some languages seem to highlight certain features more than others.

. My research on the Global Alphabet began in my attempt to enlarge my reading vocabulary as a new immigrant, by plowing through a small bilingual dictionary, writing out important words and roots. The research proceeded over some four decades, culminating in innovative materials to teach the language to foreign learners via Key-letters. But the research started with simple analysis of a small dictionary (perhaps about the size outlined in the DOE). Unaware of any literature on “sub-morphemes,” like Bolinger, I came to the hypothesis of meaningful initial consonants with the help of the dictionary’s alphabetic order. The need to ignore initial vowels (i.e. the hypothesis that that initial vowels are meaningless) popped up after about the first decade, so at least this isn’t a new, ad-hoc tweaking of the theory, but a fairly “old” part of the theory itself. (Similarly, prefixes are ignored at least in the initial analysis, although they can have Key-letters on their own (as in *Pro-Pel*). Further, certain letters belong to a second tier of “nonkey” letters: silent and vowel letters (*y*, *w/v*, *h*, *ʔ*, *ʕ*, and even *n* and *t* depending on the language.⁴ Only very recently was it seen that equivalent letters had similar meanings in various languages in the Semitic as well as Indo-European languages. Thus we can see Italian *voLare* ‘fly’ and Greek-derived *eLysium* as belonging to *L*, and *request* and Hebrew *ha-tiQwah* ‘the hope’ as belonging to *Q*. Connecting Hebrew and English, genetically unrelated languages (therefore representatively distant points), a much later, almost accidental surprise, shows many examples of relationships **hiding in plain view**; English examples include both native English words and words borrowed from Latin and French, and even Greek (e.g. *eLysium*), including *biLingua/Lip*.

With a \sum of 1, we might expect the 20 alphabet letters to exhibit on average one to three words with the same initial letter and similar meanings. But the fact is that 5 or more can easily be found between Hebrew and English for all 21 Key-letters (to be given below). Only the most infrequent letters have just two or three.⁵ Obviously the results are way above random coincidences.

B-octopus.

<i>H.</i>	<i>Barekh</i>	<i>Baqar</i>	<i>Bneh</i>	<i>Beyn</i>	<i>Bqaʔ</i>
<i>E.</i>	Bless	Beef	Build	Between	Break

Whether the letters compared are initial letter or initial consonant doesn’t change the calculation of expected coincidences arithmetically.⁶ Which letter, if any, is a Key-letter is an empirical question. Finding 5 or more Hebrew-English coincidences for many letters is strong statistical evidence, off the charts of probability, that more than random behavior is going on here. My explanation for it is the Global Alphabet, i.e. the idea that the Key-letters have meanings. Below I will provide an octopus involving an odd cross-linguistic pairing, English *J/X* with their Hebrew equivalent (by meaning) *Tz*. Here will add an example of another kind, an all but universal word, unexplained by mainstream linguistics.⁷

⁴ In Hebrew, nonkeys have meaning only when no first-tier Key-letter is present in the word, e.g. *w* is a prefix meaning ‘and’ (cf. English *With*), but acts as Key-letter in *Waw* pronounced *Vav* ‘hook.’ It acts as nonkey in *weRed* pronounced *vèred* ‘Rose.’ Here as elsewhere, the meanings of Key-letters are parallel in roots and affixes, e.g. the Hebrew plural in *cherubiM*, *seraphiM* has the same meaning as *MAXI-M*, in *Many*, Russian *Mnogo*, etc.

⁵ E.g. *qaw/queue*, *tiqwah/quest*. The parallels are much more numerous for all letters when groups of Key-letters are considered, e.g. Hebrew *Qól* ‘voice’ and English *Call*.

⁶ Of the very few researchers following similar assumptions, the Global Alphabet is closest to Bolinger; Magnus posits meanings for each consonant, but her statements of meaning are sparse, e.g. just listing two random words for *L* with no general definition. Malik suggests that the three consonants of the Semitic roots have descending importance. From Bolinger I take the concept of *rhyme* as the meaningless remainder of any word.

⁷ Linguistics is crucially focused on universals, but only **formal universals**, concerning the forms of grammatical processes like transformations. **substantive universals**, including both the forms of features have less extensively discussed. (Phonetic features have been discussed in Chomsky/Halle, but semantic features were sketchily exemplified

This word is *Mama*, which is the word for ‘mother’ in most languages, even Chinese. Hebrew and Arabic have ‘iMa^auMm, exemplifying the treatment of initial vowels. I know of one language, Georgian, in which ‘mother’ is *Dedi* (‘father’ is *Mami*.)

Our man in the street might jump to sound-symbolism as an explanation. But *Mama* is not the sound that mothers make. The explanation here will be the meaning—or rather meanings—of the Key-letter *M*, which is PULL/TOGETHER, The same as for *.Melekkh/Malik* ‘king’ in Hebrew/Arabic. In any case, if *Mama* is onomatopoeic, how can *Mother* not be? What about *splish-splash*? The linguistic insistence on an autonomous, self-contained linguistics system now may seem to be more of a questionable prejudice than the self-evident truth that it had been for decades.

Contrived Translations?

Some of the translations given here are not the most obvious, e.g. the usual translation of *haLel* (*haLlel*) is ‘praise,’ not ‘Laud’; the normal translation of *‘eLohim* is ‘God’, not ‘Lord.’ But if in fact the dictionary gave just one translation for each word, why would it be the only one to check for the theory? There are usually multiple synonyms for many words in any language. and *Laud* also is a correct translation for *haLlel*.

The task of a DOE is to choose from various ranges of data, so we will conclude this brief sampling with an octopus from a wholly different range of vocabulary. Where *L*, *B*, *M* are very common letters... we will conclude this survey of data below with less common letters, to round out the DOE.

Finding the Exit.

If the last letter were the Key-letter rather than the first consonant, the probabilities wouldn’t change but the empirical application would be very different. Of the three researchers known to me at all who have written about Key-letters at all, none have proposed final Key-letter: the others differ only in claiming a contribution of letters in addition to the first, but none have noticed the importance of ignoring an initial vowel.

The notion of the first consonant as Key-letter does, however, offer a possible solution to the problem of whole-word recognition. Over-all shape is an alternative hypothesis, enshrined in “whole language” teaching, whose pedagogical failures, however, sooner or later inspire return to phonics: teaching letters as signs for sounds, as linguistics claims. But the implication that reading is a phonic process is belied by the efficiency of reading, especially in skim reading. Key-letter theory solves the mystery (known for over a century) of how whole words are recognized more easily than individual letters. Key-letter theory is not a mere heuristic: an initial vowels can be ignored by rule, “algorithmically,” which is especially natural since the vowels in writing are all small and less distinctively different than consonants. Linear models of word recognition imply that you process the letters one by one, then look up each whole word in a dictionary (or mental lexicon).⁸ According to the Global Alphabet, you grab the first consonant letter, and easily recall its meaning from the “Mini-Lex” (physical or mental), which lists the 21 Key-letters with their meanings.

εΞοδος	□□it	haici
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The first-consonant principle. As the examples show, the Global letter does not have to be word-initial, but it must be the **first consonant** of a word or root. (Prefixes are ignored, at least initially.⁹) This first consonant is the **Key-letter**, a **semantic determinative** giving a **HELPFUL HINT** about the meaning of the whole word.

for the one word *bachelor*, and spelled out since for small groups of lexical items in the work of Lanacker, Talmy, etc.) The significance of the universal word *Mama* seems to have been ignored for any significance, in spite of the broader significance of the universality of *M* in words for ‘mother.’

⁸ “Whole language” implies that words are learned as visual wholes by over-all shape. The failure of this model is shown by the way in which children in Whole-Language classes end up memorizing stories. Phonics and Whole language attack reading from opposite directions. The Global Alphabet attacks it from the middle, with Pixtories (alliterative graphic stoeys sentences).

⁹ Prefixes and suffixes can also have their own Key-letter: In *ProPel*, both *P*’s are Key-letters. The *M* of the Hebrew plural suffix in *seraf-iM*, *cheub-iM* is also a Key-letter, the same one as in *Many*, *Millions*, *Spanish Mucho* ‘Much, many,’ *Russian Mnogo* ‘Much, Many.’ But it is important to ignore any prefix for the initial analysis, e.g. in Hebrew *moTzi* (the name of the most famous Hebrew blessing) has the prefix *Mo-*, and the Key-letter *Tz*, which is equivalent to English *J* (or *X*).

Historical support.

Strong support for the Global Alphabet is also found in the graphic evolution of letters, the fact that certain letters evolved into an iconic (graphic) presentation of the meaning, explainable as an attempt (or a subconscious tendency) to express the meanings of the letters in their form. The clearest examples (from Hebrew, Greek, and English) are as follows.

<i>earlier form</i>	<i>later form</i>	<i>meaning</i>	<i>Examples (meanings)</i>	
			<i>Hebrew</i>	<i>English</i>
⚡	Σ, S	Spin	Spin, travel, Sinai, doubt, horse	Spin, Sew, So
Γ	C	Cut, Catch, Collect	Conquer, spoon, jug, all, Chair, Church	Conquer, spoon, jug, all, Chair, Church

Iconization.

The evolution just cited shows how the Global Alphabet is iconic, displaying (in its later form) the Key-letter meanings (and hinting at the meaning of whole words) pictorially. (The hint is sufficient to often allow reliable guessing of words in context on the basis of the two Main Meanings of each letter, as I have seen in teaching.)

Pixtories.

Pixtories (Picture+sTories) are alliterative sentences that display the meaning of a Key-letter, showing how the Key-letter is iconic, e.g. with tall L meaning LIFT. Similarly:

Pull your lips together and Meditate with ‘oMMMMMMMM.’!

M	together	Many Men & Mice Marry Mermaids and Multiply.	Meditate with Magic Mantras	
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Lift your Legs & Lips to Learn a Lovely Language!

L	Lift	eLevators Lift eLephants to the Alps.	Laud Lofty Letters!	
J	Jut	Jet off on Jolly Journey		
B	Bulge	The Bible is a Bountiful Book, Bulging with aBundant Blessings to Build on.	Boisterous Boys & Buxom Broads	
Sh	Shelter	Shut up in the Shelter of the Ship	Shower, Shave, in Shirt & Shoes	
PF	Push Forward	Push Forward till you Pop	Father was First to Plant his Foot	as Brother Built a Brewery Building
C	(Cut) Catch & Collect	Collect Cups & Caps in a Chair n Church.	Cats & Canines Catch & Collect Crabs	
R	Stretch & enlighten	Reach the goal on the RailRoad to Read the Reasons	Row the River as you Read the Sun’s Rays	
H	Hug Hot	Hug Hot until you’re Hail & Hearty	Have a Heart & Hold your Head	
G, S	roll	Glide & Slide, Spin a Scroll	Go, Greedy Guys & Gals, Glide and Grow till you’re Great	
Q	Jump & Quarantine		Jump on the Queue for your Quest	
T	Drop	Travel		
D	Push Down & judge		Dirty Dogs Dump on the Decision	
N	focus/negate		Put your Nose on the Note, and Negate Negation	
M	Mini-Max		Mix with Mermaids in Mini-skirts	
L2	Lock		Lock up the Little ones with Lullabies	
GS2	close		Get to your Glowing Goal	

The Key-letters have various **sub-meanings**, which are parallel in different languages: *BLATANT/BOUNTIFUL B*, *WISE D*, etc.

Sound-symbolism.

The proverbial Man in the Street may believe that language is, in large or small part, sound-symbolic (onomatopoeic). In this he is contradicted by one of the axioms of linguistics. While it sometimes may appear that words have a distant onomatopoeic origin, the more important linguistic fact is that they eventually become “lexicalized.” So cock-a-doodle-doo may be the ultimate origin of cock. But *Cock* is a noun, able to pluralize. All languages have ways of introducing onomatopoeia with *verba dicendi*, e.g. *Ducks say quack-quack*. This lexicalization is the reverse of the above process with letters becoming more iconic:¹⁰ there the arbitrary becomes iconic, here the iconic becomes arbitrary.

Of course speech precedes language, in phylogeny as in ontogeny. So it is reasonable to assume that, even though the Key-letters are more iconic visually than phonetically, that they must reflect an earlier onomatopoeic system, which must have been in effect (at least in Indo-European and Semitic languages) at about the time the alphabets were first used. It is not at all obvious that individual sounds have onomatopoeic value: *L*, which is produced by LIFTing the tongue, may be obvious, but others are not. *Mama*, for example, is not the sound that mothers make, although it is a fair approximation of the sound that babies make when suckling.

More generally, the meanings of the Key-letters were determined, over three decades, by examination of lexical items in the one initial language. The application across the Hebrew-English divide was actually a sudden later surprise-but a crucial one, not only for the empirical comprehensiveness of the theory but under the assumption that onomatopoeia is likely to be somewhat universal, at least more so than the more typical arbitrary lexical items. This gives such a further surprising confirmation of the whole theory as it had been developed for just one language.

To return briefly to the DOE, let us note that the whole point of a DOE to use crucial points from various parts of the envisaged “whole” experiment. Here it is less important to supply the relatively obvious examples for the more common letters, and more important to look in obscure corners. One such corner involves the Key-letter *J*, especially because it corresponds to a completely different letter in Hebrew, namely $\hat{T}z$. These letters are phonetically quite different, but look similar, in line with the iconicity seen above.

A J-octopus.

<i>Tze^a</i>	<i>Tza^oir</i>	<i>Tza^ooq</i>	<i>Tzahov</i>	<i>Tzedeq</i>
Jut, go-out	Juvenile	Joke	Jaundiced	Justice

J and *X* are actually both equivalents of Hebrew (and Slavic) *Tz*, as in *eXit*, etc. Thus Slavic *Tzatzka* for the female breast corresponds to the colloquial use of Hebrew *Tzitzit* (literally referring to fringes as on a prayer-shawl) in the same meaning. One might ask why *Jaundiced* is used rather than the more obvious and common *Yellow*, and why *Juvenile* rather than *Young*. Here the Key-letter groups come to the theory’s rescue, in that the group is: **J, X, R, Y**. As mentioned before, the groups are not wholly phonetically based, as seen in **G/S**—an odd group until one notices *Glide/Slide*. Of course the meanings as given, while mere hypotheses and always subject to revision, resulted from decades of study and teaching of the initial language, with the surprising confirmation of the wholesale equivalence of English and Hebrew. It is said that a gaffe is when a politician accidentally tells the truth; conversely, when a coherent (even if novel) theory makes odd predictions and these predications turn out to be correct, these are strong confirmations of the theory. Thus when ballistics experts predict where a rocket will land and it lands there, that is not magic nor a lucky guess, but support for ballistic theory, notwithstanding the strangeness of the Lobachevskian (3-D) geometry on which it is based, in which parallel lines sometimes meet. Similarly, the atomic bomb conformed $e = mc^2$, even though here the mathematics is not as transparent as we might like.

Before explaining (much less explaining) counter-examples, a coherent general theory is needed. The theory of the Global Alphabet is contained in the Mini-Lex, a matrix of Key-letters and their meanings.

¹⁰ In any case, orthodoxies are really just intellectual mobs, whether in religion or science, ruled by social coercion as much as by logical arguments. Science, like politics, is supposed to be transparent, but often isn’t.

Internal theoretic support is thus found for the Global Alphabet in the coherence of the system: the Key-letters belong to seven groups, which in turn belong to two super-groups. The meanings and sub-meanings are parallel within groups **on both levels**. More specifically, each Key-letter has two Main Meanings (how and why will be explained below).

the Mini-Lex.

OPENERS	Key-letters	Mm1	Mm2
1. PUSHERS	B, P, F	BULGE, PUSH-FORWARD	
2. SHOOTERS	Z, Dh, Sh	SPRAY	
3. JUMPERS	J, R, Y	JUMP	shine
CLOSERS			
4. DROPPERS	D, T, Th	PUSH DOWN	judge
5. CHOPPERS	CK, Q, H	CUT	Collect
6. MIXERS	M	PULL	together
6B. NEGATORS	L, N	LIFT	Lock
6C. HOOKER	W	WIGGLE	hook

additional support.

Interestingly indirect empirical support for the Global Alphabet is found in the graphic evolution of letters. This is the fact that certain letters evolved into an iconic (graphic) shape to express the meanings of the letters in their form. The clearest examples are as follows

earlier form	later form	meaning	examples	
			H.	E.
Ξ	Σ, S	Spin	Spin, travel, Sinai, doubt, horse	Spin, Sew, So
Γ	C	Cut, Catch, Collect	Conquer, spoon, jug, all, Chair, Church	Conquer, spoon, jug, all, Chair, Church
Δ	dD	Press down	Bear, honey, judge, know	Down, Dirty, Dog; Decide, Dean
I	Zz	Spray, throw	Throw, seed, Zany	Zany, Zoo, Zebra

Even more additional support, on a purely analytic level, can be based on learnability: Can we not assume¹¹ that Hebrew *Dvorah* and *Dvash* ‘bee, honey’ are easier to learn than, for example, *Paráh, Haláv* ‘cow, milk’? This especially holds for reading: Although vowels are more distinct in speech, consonants are more distinct and more salient in reading, as shown by the fact that they vowels are often not written in Hebrew, and in all languages are more alike in print. This Hebrew example is especially interesting because we cannot really identify (hypothesize) a plausible meaning for *Dv*-itself.¹² Our ability to formulate a Min-Lex is itself thd xtrongext theoretczl support fie the general Hypothesis.

Tweaking and Super-Tweaking.

Ambiguity in language.

The ambiguity of words is one of two central lexical problems that face users/learners of languages, as well as linguists analyzing language. Ambiguity simply means having two distinct meanings; these meanings can even be opposites (“contronyms”).

# IO LION St.	<i>Oversight prevents <u>oversights</u>.</i>
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¹¹ without controlled experimets

¹² For reading Hebrew, the greater learnability of *Dvoráh/Dvash* is even clearer in view of the consonantal writing system (even though some vowels are spelled, and even if, as is surely the case, pronouncing is somehow involved in the learning of printed words. All this is assumed here as starting point. Learnability therefore does not depend on there being a actual linguistic unit for memory to utilize. However, it will further be assumed that, if we could identify an actual meaning with *Dv*, that would argue for there being an actual linguistic unit, a phonestheme, *Dv*. In Hebrew (in which consonants ate specially prominent although vowels are sometimes dspelled)), this would extend to *Dov* ‘bear.’

In language use, the process of disambiguating, more of a fun puzzle than a problem, is called “**tweaking**.” It is part of the way symbols work, e.g. that Ø might be a symbol of negation or a symbol for null, or a Scandinavian vowel. **All humans tweak**¹³ items of language and other signs/symbols continually in their daily life. Tweaking can differ in different languages. For example, English has no single word with the range of meanings of Hebrew *Kaf* (‘spoon, shovel, palm of hand). But even without special instruction, anyone is capable of tweaking in new languages, simply by applying the “logic” of daily life. For example, can you correct the following (over-literal) **mistranslation** from Hebrew? *The girls dug a deep well with their spoons, and got their spoons dirty*. Part of the logic here is that, when the same word is used twice, you must decide whether it has the same or different meanings. This is **usually** (not always) an easy intuitive choice, like figuring out who pronouns refer to, as in: *Jack insulted Jim so he kicked him*. Hebrew examples for tweaking (and super-tweaking).

Tweaking			& Super-tweaking						
He <i>Kaf</i>			<i>Kad</i>	<i>Kós</i>	<i>Kis</i>	<i>Kipah</i>	<i>Kise^a</i>	<i>yaKhól</i>	<i>Knesiyah</i>
Spoon	Shovel	Palm	Jug	Cup	Pocket	Cap	Chair	Can	Church

Many Hebrew words with **Key-letter K** refer to various **Kinds of Containers, including places**, and even verbs & adjectives of CONTAINMENT and POWER/CONQUERING). So any Hebrew words in *K* can be “super-tweaked” by context, e.g. *the rabbi wearing a K, was uncomfortable in the K, so he sat down in a K near the door*.

As you can also see from the English translations, the **Key-letter K** is paralleled in English by the **Key-letter C**: *The rabbi was uncomfortable wearing a C in the C, so he sat down in a C near the door*.

the Hebrew-English mirror & the iconic nature of Key-letters.

Hebrew and English letters are often mirror-images of each other, because of the opposite direction of writing in the two languages. This fact highlights the **iconic** nature of Key-letters generally, which was shown above in the evolution of letter-shapes.

So Hebrew <i>Kipah</i> ‘skull-Cap’ is a mirror-image of <i>Cap</i> , again with the Key-letter poised to swallow the rest of the word.	
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A similar evolution occurred in *S*, which originally looked like Greek Xi (Ξ), which is derived from it. In Hebrew it evolved into a circular shape, iconically representing its meaning SPIN as in *Sov, Sevivón* ‘Spin, Dreidel!; In Greek this sound was represented by the angular Σ, which, however, developed the later form σ—the mirror-image of the Hebrew letter. In the Roman alphabet, the angular Greek Σ similarly evolved into two attached circles, arguably even more iconic: *Spin the Scroll*. (Can't you see the Scroll Spinning in the *S*?)

The Shape of Meaning.

The Hebrew-English mirror highlights the more generally obvious (when noticed) **iconic nature** of Key-letters. Because of their iconic nature, word-meanings can “**jump up from the page,**” as students put it—but only, of course, if the “secret code” has been revealed, e.g. that a tall letter is used for LIFT, and a grasping letter *C* for CATCH, COLLECT.

Key-letters as Naughty OR nice: contronyms.

Most challenging for learners is the abstractness and ambiguity of the Key-letters, although in fact they each refer to a simple action in their first Main Meaning. But metaphoric extension is abstract, even if it is the only way a lexicon can be adequate to an ever-expanding universe. But Key-letters as contronyms, in particular, are a challenge to the understanding of both scholars and learners. However, the main examples are abundantly exhibited in English as well as Hebrew and other languages. Especially interesting are how the Key-letters, according to their groups, have parallel Main Meanings. Most startling are:

¹³ (Jerks twerk, but geeks tweak.)

N: focus/Negation.

- How strange it is that Hebrew has *‘aNi*, *‘aNu*, *‘ayiN* 'I, we, I' meaning FOCUS alongside *‘éN*, *‘aNi* 'not, poor' meaning NEGATION? Isn't *‘aNi* 'I am poor' intolerably confusing, given that *‘a* and *‘o* (*‘aleph/‘ayiN*) are both silent? This is of course just like *oversight prevents oversights*. But a far more pervasive ambiguity pervades English (both native roots and Latin borrowings). It does indeed bother most English speakers for a while, but we get used to it. In native English words, we have *in*, *on*, and opposed to *un-*; in Latin borrowings we have the confusing reflex *in-*: *invade* vs. *intolerant*. (With the initial nonkey *-w-*, we also have Latinate *veNi* 'come.')
- Almost as interesting is *MAGICAL M*, which includes *Mini-Max M*, as in *Much*, *Many*, *Million*, but also *Midget*, *Mini-skirt*, combined in the superhero *Mighty Mouse*. Also Russian: *Mnogo*, *Malo* 'a lot, a little.' And Greek *Mega-/Micro-*. (Apparently *Men*, *Mice* contain this odd duality within themselves.)
- In the super-group of CLOSERS all Key-letters have an *mm2* in which the basic action of the *mm1* reaches a result involving some sort of CLOSING. Thus *S = SPIN > SEAL*, *C = CUT > COLLECT*. Again, these generalizations all involve many examples, analyzed, collected, and taught over 30 years.)

Key-letters	L	W	N	D	T	M
<i>mm1</i>	LIFT	WIGGLE, WATER	FOCUS	DROP	TRAVEL	PULL, MINI
<i>Mm2</i>	LOCK,NEGATE	HOOK, WITH	NEGATION	JUDGE	OTHER	TOGETHER, MAXI

MINI-MAX M (or more generally *MAGICAL M*) is the most challenging. Compare the insight that the *OM* (actually pronounced *oMMM¹⁴*) is the most “empty” sound, suitable for “draining the brain” in meditation.


Mini-Max M is well documented, e.g. Russian *Mnogo/Malo* ‘a lot, a little’; Greek *Megas/Micros* ‘big, small’; Hebrew *Me‘od/M‘at* ‘very, little.’ In all these languages the bridge between these opposites is supplied by the meaning *MEASURE* (Hebrew *Mdod*, Russian *Mera*, Greek *Metron*).

Closers:

Key-letters	S, G	CK	Q	H	W	M
<i>mm1</i>	Spin	Cut	jump,Quake	Cut,Hack	WIGGLE, WATER	Pull, wet, Master, Murder
<i>Mm2</i>	Seal	Collect	Quarantine,holy	Hug, Hold	HOOK, WITH	Together, Mix, Marry

WISE D” and World Literature.

For the following verses in Latin, Greek, and Sanskrit, it is enough to know “*WISE D*”: that the Key-letter *D* means 'SEE' JUDGE' or /KNOW.'

	Not Judge Judy; it’s “Judge Droopy.” <i>D</i> means ‘Drop Down’ or Press Down, <i>D</i> ” OR (<i>mm2</i>) ‘judge, see, know, say’ (wise <i>D</i>). Hebrew <i>Dan</i> = ‘judge.’; <i>Daber</i> ‘speak’ is the basis for <i>abra-ca-Dabra</i> ‘I-create as I speak/say.’	 <i>Guru Pan-Da¹⁵</i>
The ‘Drop Down’ meaning (<i>mm1</i>) is the basis for river-names in Eastern Europe:	River names ¹⁶ (rivers flow down) <i>Don</i> , <i>Donetz</i> , <i>Dnepr</i> , <i>Danube</i> . <i>The Ancient Greeks</i> (living in the South) <i>called themselves Danoi.</i> ¹⁷	

¹⁴ as expressed in the Hindustani proverb, *Om mera nam, ultha sidha ek samán* ‘Om is my name, forwards and backwards one and the same.’ Sanscrit *eKa*, Hindustani *éK*, is parallel to Hebrew *eHad* ‘one.’

¹⁵ “Guru Pan-Da” is an **association** to help make of the desired connections. While it’s easier to see *C* as “capturing,” associations are more powerful when odd or humorous. Russian *Da* ‘yes’ is an example of *WISE D*, as if meaning ‘I know!’

¹⁶ Rivers can be named with various Key-letters, including *R* in River, Rio, like Greek *Rhei* ‘flow,’ hemo-rrhage), and *G* in Ganges, where *G* = ‘ROLL.’

¹⁷ Perhaps because Greece is located at the “bottom/end” of European rivers. Note that *Down* is a natural metaphor for the South. Russian words based on *D* include *Dno* ‘lower depths’ (as in Gorky’s play) and from *WISE D*, *Da* ‘yes’ (≈ ‘I know’).

To comprehend, just translate any *D*-word with ‘judge, see, know, ’ as best fits the context. Read the filled-in translation aloud.

Most of these verses are on the question where the Universe came from (and by implication, where it’s going). If the question itself doesn’t interest you, just link the answers given here with their cultural/religious background. Note that vowels, prefixes, and certain letters (*y*, *w/v h*) preceding the Key-letter are ignored.¹⁸

Verses of world lit.	
^{Latin} veNi, viDi viCi ¹⁹	I-came, I- saw I-conquered
^{Greek} Ouk eiDôs	“when-I-don’t- know (something),
Ouk oiomai eiDenai	not I-think that I _____ (it),
Ou mé pausomai philosophón!	(I will) not stop _____ -ing (=Loving wisdom).
^{Sanskrit} Ko veDa Ko addha veda? kuta ajata? Yo asyad’yakshah parame vioman, so anga veda yadiva na veDa.	Who truly knows where (it all) was-born? He who-surveys- highest-heaven, he alone _____ or-else (he does) not know .

Beyond IndoEuropa. (Can you make anything of these?)

^{Hebrew} ETz Da ^o at tov wa-ra ^o	the-tree-of know ledge-of good and-bad”
Galah ^o aMi mi-bli Da’at.	Was-exiled o my-people from-non-____ -ledge”
Da’ me ^a ayyin atah ba’	know from-where you come!
^{Arabic} La iLah ila aLlah...	There-is-no god except God
Maalik yawM al-Din Illadhi ya ^o Llam bi-I-Qàlam Ya ^o Llam al- ^a insaan ma lam ya ^a Lam.	Ruler-of-the-day-of judgment , Who teaches* with-the-pen, Teaches the-people What they don’t know .*

¹⁸ *D* would eventually drop in the Romance language, leaving *W/V* as Key-letter for ‘see’ (presumably *W2* HOOK, meaning that ‘seeing’ is a “hook” (connection) between the eye and the object seen. Note how *See* also has a CLOSER” as Key-letter in the Mini-Lex; in other words, Spanish *Ver* ‘see’ means ‘wiggle to establish a connection with,’ where Greek *Oida* meant ‘Drop down to see and judge.’ If this analysis works, the parallel shift from ‘see/know’ to ‘see’ can be considered (weak, secondary) confirmation of Key-letter theory. The cross-linguistic analysis of *Tz* and *W* are far more dramatic departures from phonetics.

¹⁹ Here as often elsewhere, *V* is a variant of *W*. (In Hebrew *V* can also be variant of *B*, just as *F* is a variant of *P*. Generally, an individual language can omit or combine specific Key-letters in slightly varied ways.)

More Hebrew verses.

#	Hebrew	Mistranslation*	translation
1	b'- ^o R Panèkha Ni-R ^a eh ^o R	In-the-Rays-of your-Phace Nosotros-Read Rays	In-the-light-of your-Face we-see light
2	Barúkh ^a aDonayy ha-mBhorákh l- ^o oLám ²⁰ va- ^o eD**		Blessed (is) the-Lord who-is-to-be-blessed forever and-ever
3	^a aLénu l'haLeI ^a eL ^o eLyón.	Our-Load to-Laud the-Lord (who is) Lofty.	(It is) our-duty to-praise God on-high.
4	Qaróv ^a eLayy b'Qor ^a -l ^a eLáv	(God is) Qlose to-me when-I-Qoll to-him	
5	uwPhroΣ ^o aLéNu Sukat Shlomèkha	And-unPhold upon-us the-Seat-of your-Shelter.	And-Spread over-us the-tent-of your-peace

* The “mistranslations” use the “Parallel” words, as give by the Global Alphabet.

**All Hebrew verses, in Bible and Prayerbook, have melodies. The traditional melody for this verse is behind the well-known Gershwin song, *It Ain't Necessarily So*. By using this religious melody, Gershwin injected a satirical twist.

Ambiguity, Key-letters as contronyms: Naughty & Nice (r^o)

Linguistic units do not contain built-in judgments: any word, root, or Key-letter can be “Naughty or Nice.” So *You're bad* may mean ‘You're good.’ So the Hebrew root R^o may be R^e^oa ‘friend, neighbor’ (as in “you shall love your neighbor as yourself” or *Ro^oeh* ‘shepherd’ (as in “The Lord is my shepherd, I will not lack.”; or *Ra^o* ‘bad, evil,’ as in “Don't follow the many to do evil” or “Hate evil and love good.”

What field does the Global Alphabet belong to?

Logically, according to its subject, it might seem to belong to semantic theory in linguistics and semiotics, as branches of cognitive theory, and/or culture studies, etymology (the study of word origins), and/or psychology, anthropology and even IndoEuropean linguistics and archeology, not to mention scientific method.

There is one reason that it can't be assigned to linguistics, because it is in partial conflict the two main assumptions of linguistics, dating from de Saussure (c.1900): (1) that language is primarily speech, and writing a mere secondary representation of speech, letters being mere signs for phonemes; and (2) words are arbitrary sequences of sounds or letters, with equally arbitrary meanings. Together these axioms deny that onomatopoeia has any place in human language.

But the idea that **abstract** phonemes are represented in writing (and therefore may have a status far beyond being mere signs for phonemes) goes back to Chomsky Halle's classic *The Sound Pattern of English*. Further, in reading theory, it is assumed that the content of any text can be represented as a semantic array, such as a matrix. Skim reading makes a direct link between a random collection of words recognized and the matrix; this link allows for skim reading even in exotic languages with a difficult alphabet after short study (not with the accuracy of a native speaker, of course).

It is a mistake to define a field by anything but its empirical domain: assumptions, even axioms, like rhetorical styles, often do change. This is shown with particular clarity by Lobachevski, the “Copernicus of Geometry,” as well as by Copernicus and Galileo themselves.

²⁰ Hebrew *oLám* means both ‘ever’ and ‘universe,’ and is a possible inspiration for Einstein's Space-Time Continuum, just as *Kalkel* ‘support financially’ is a probable source for Newton's *calculus*. Newton and Leibniz were both fans of Kabbalistic writings, which were a link with modern science (through the Italian Renaissance), even though they were often dismissed as superstitious by the developing mainstream in Jewish and Christian circles alike.

Lobachevski was refused publication in 1905 by the Novgorod Academy of Sciences. Despite Tom Lehrer's song, accusing him of plagiarism, Lobachevski's problem was that he was too original. How could his theory even be considered geometry? It contradicted Euclid's Fifth Postulate! But in fact, his "Global Geometry" not only made possible the geometric analysis of spherical surfaces, such as Earth, making it possible to chart flight plans as well as understand how longitudes are parallel and yet meet (at the poles). His geometry also founded Modern Logic, with the revelation that axioms are not (as believed in Euclid's Flat-Earth geometry) eternal truths, but rather conditional assumptions, which might be true in one theory but not in another. Ultimately, of course, a theory must be evaluated for its empirical adequacy, apart from preconceptions of experts. A "Flat-Earth" theory like Euclidean geometry, that disallowed flight plans, would be empirically inadequate for Earth. Similarly, a theory of language that outlaws onomatopoeia would be empirically inadequate for any human language, since they all contain systematic ways of introducing onomatopoeia, namely **verba dicendi**, as in *Ducks say* "quack", as well as many onomatopoeic words, unless we arbitrarily banish them from "the language" itself." (It is indeed not practical to list *bow-wow* in an English dictionary, but this omission does leave foreign learners in the dark.

Without a time machine we can only posit—using the axiom (this one true) that that speech precedes writing, that the Global Alphabet must be a lexicalized version of a system of "Old Onomatopoeia in force, apparently, when the various alphabets were first formed and then evolved. The letters themselves (forms and sounds) were borrowed into Greek, etc., from the Canaanite (aka Phoenician or Paleo-Hebrew) alphabet, but the meanings, as we see them in the Global Alphabet, must have been present in the various languages (some of them not genetically related to each other). By this time, in other words, as sounds, they were already **hiding in plain sight**.

Creativity.

Transformational-Generative linguistics was invented as a response to syntactic creativity, exemplified by Chomsky in the classic sentence *Colorless Green ideas sleep furiously*. Getting beyond such ultimately controversial examples, TG linguistics eventually showed its superiority over earlier, more superficial theories of syntax by explaining the **creativity** of language use: the ability of speakers to produce and understand novel sentences. While lexical creativity is not as open-ended as in syntax, it is real, too, with neologisms like *Boobs* for the female breast, *Boy o Boy!*, (a general reaction to Bounty, etc.), *Booyah*. But more broadly, the goal of any lexical theory is to solve the **lexical problem**: to explain how speakers comprehend, acquire, and subsequently access the thousands of words in their vocabulary. This is the primary lexical problem, more central than ambiguity. The Global Alphabet explains, in other words, **How words mean**, and why they mean what they do, and not something else.²¹ This question is of course nonsense for linguistics, for which words get their meaning by mere accidental, arbitrary consensus, a "democratic" version of the Red Queen in Wonderland's lexical theory.

What we see, however, is that the onomatopoeia that can reasonably be posited (as here) as the origin of Key-letters, reasserts itself in lexical creativity as in these examples with *Blatant B*, or *La-la-la* to express (or create) an emotional LIFT.

Not surprisingly, it is the onomatopoeic aspect that is most cross-linguistic (at least according to the present hypothesis), and this is where we find most general applicability of the Global Alphabet, even to Chinese and other languages beyond the Semitic and Indo-European families initially included in the hypothesis. Thus in Chinese we have *Mama/Muchin* 'mother' and even *Fuchin* 'father' (sub-meanings of pushers include both TASTY AND ASSERTIVE PUSHERS; from *TASTY PUSHERS* we get also also *Fan* 'rice; next to Spanish *Pan* 'bread.' Which we can add to the connections hiding in plain view, along with Russian *Bulki* bread-rolls' and Persian *Panir* 'cheese.' The more general *BLATANT B* allows one to guess that Russian *Boʻshoy* and {Persian Bozorg both mean *Big*. More generally, the **first-consonant strategy** helps us notice the parallel *Biblos/Book*, *Beau/Beautiful*, etc. Note that this strategy, in FL learning, does not have to be actualized in a majority or large plurality of words in order to be useful. (This note supports the numeric analysis via the DOE.)

We might think that it should be called 'interdisciplinary.' But the InterDepartment" has no office of its own, no stationery, no department secretary, and no journals. If interdisciplinary ideas try to enter an existing department, the reaction will likely be" NIMBY."

²¹ Of course the Global Alphabet is not a generative theory, predicting exact meanings. Linguistics has moved far beyond generativity, especially in incorporating pragmatics (including discourse). For some, semantics theory has become a bit of a waste-basket or no-man's land **between** syntax/lexicon and pragmatics (where semantics and pragmatics both used to be waste-baskets beyond syntax: "how language is used," as Chomsky put it in 1965.

The Interdepartment has no name, and its meetings are in the corridors and hallways and stairwells, unlisted in course catalogues. (Of course we know from universities that some of the most interesting and important interactions and ideas happen there, rather than in lecture halls.)

Applications.

Does the Global Alphabet have any practical applications? Perhaps it’s best not to ask. After all, a “good teaching” award might prevent a professor from ever getting promotion and tenure at a research university! But practical applications are in fact a good ultimate test for any theory.

The Global Alphabet can contribute most powerfully to all aspects of reading, from helping children learn the letters by seeing them “animated” in Pixtories and acting them out in song and dance; to helping adults with reading problems (from dyslexia to aphasia) by focusing them on the most important part of any word, as in the example of the “eXit” signs. The simple suggestion to pay attention to the first consonant of any word in correlation with its meaning provides an obvious shortcut to effective comprehension and learning, which cannot but help dyslexics and aphasics, (but only if actually learned and followed).

For any adults and children, the Global Alphabet opens up a **Global Safari** through of words and ideas, for any adult or child ready for it, curing glossophobia.

- The most powerful shortcut can be found in learning to read (i.e. comprehend) in a foreign language, as can be seen in the following sample of world literature with the help of *WISE D*.



6. Guru Pan-Da & World Lit. Guru Pan-Da.

World literature:

For the following verses in Latin, Greek, and Sanskrit, it is enough to know “wise D”: that the Key-letter *D* means “see” or “know.” Recall that *V* is a nonkey.

Latin, Greek, & Sanskrit Verses:

Some of these verses are on the question of knowledge and where the Universe came from (and by implication, where it’s going). This is arguably the most important question there is...even if your answer is a negative. It may be interesting, if the question itself bores you, to link the answers given here with their cultural/religious background.

veNi, viDi viCi	I-came, I-____, I-conquered
Ook éDôs	“when-I-don’t-____ (something),
Ook oiomai éDenayy	not I-think that I ____ (it),
Ko veDa	Who truly ____?
Ko addha veda?	where (it all) was-born?
kuta ajata?	He who-surveys-
Yo asyad’yakshah	highest-heaven,
parame vioman,	he alone _____
so anga veda	
yadiva na veda.	or-else (he does) not ____.

Beyond IndoEuropa.

Can you make anything of these?

ETz Da’at tov va-ra’	the-tree-of ____ -ledge-of good and-bad”
Galah °aMi mi-bli Da’at.	Was-exiled ↩ my-people from-non-__ ledge”
Da’ me’ayyin atah ba’	_____ from-where you are-coming.

While the best way to enjoy and learn any literature is to consider its content, its actual ideas, and their implications for your own life and thought. Another, equally legitimate way to appreciate literature is to trace its sources and influences.

Unless you're a professor of poetics, you will be most interested in the cultural connections of the content, not just its form. So don't be anti-semantic! How do these lines compare to the cultures they come from? You can match the ideas expressed in these verses with information about the various religious traditions.

On the poetics, it may be interesting to note that alliteration emphasizes meaning because it repeats Key-letters, whereas rhymes create surprise connections between unrelated meanings.

The Global Alphabet and Literacy.

Literacy is as important for civilization as the alphabet is important to modern languages.²² The Global Alphabet has obvious applications for teaching literacy to adults and children, via Pixtories which display their meanings, "animating" their words, so that the "Meanings of words jump up from the page," as some students express it. Thus animating words along with teaching meanings along with sounds, gives an obvious advantage from a cognitive perspective. Those who complain about how meaningless, for example, Hebrew prayer is might point their finger at the "anti-semantic" methods used in teaching Hebrew. This anomaly is reflected in the sad fact that most of these Jews, religious as they may be, may know the *motzi* (the most basic blessing, the grace before meals) as well as their own telephone number, and yet do not know the meaning of the word *motzi* itself—a word that is as basic to Judaism as *monotheism*. The ignorant include Torah readers and principals of Hebrew day-schools. *Kaddish* is a similar word: Allen Ginsberg's famous poem of this name shows that he knew the sound of the original (from hearing it and probably saying it many times) but had apparently never even read the facing translation. Such is (ironically, with pun intended) the "anti-semantic" approach used in teaching Hebrew as well as Arabic.

For FL study, the Global Alphabet offers a vocabulary of the lexical roots, or "toots of roots") equivalent in size to a first week's vocabulary in any single language, but covering the whole language, and also any other language (at least in the Semitic and Indo-European families). A few moments of thought should show definitively that vocabulary is the most important dimension of language, if not also IQ (since many so-called IQ tests as well as other academic tests are really vocabulary tests in large part). Certainly it is the best test of real abilities in a foreign language.

The Mini-Lex, although just 21 items, should not be memorized the first week, but should rather serve as a platform for a SOLE (Self-Organized Learning Experience), in which learners use it along with a bilingual text, e.g. to study the Hebrew Bible in the original from the first days of study, rather than after a year or two of grammar and vocabulary study without context.

The Mini-Lex, in other words, is a platform, for a SOLE in any Semitic or Indo-European language. While there are other connections between languages, such as Indo-European roots and Grimm's Law for Indo-European languages, the Global Alphabet provides a simpler, broader Key, usable during learning without the grueling prerequisite of ordinary vocabulary and grammar study (or Grimm's Law). The very ratio between 21 Key-letters and the many hundreds of words needed to comprehend a language at all, should be persuasive, even if the abstractness is regarded as a negative, rather than an opportunity for making language study interesting on its own, not only for the texts that it may open up.

On a theoretical level, the Global Alphabet offers the MiniLex as an organized theory and theory of vocabulary, as opposed to the unorganized pile of words assumed in the mainstream. (The alphabetic order of dictionaries is here viewed as a pre-theoretic attempt to capture this posited mental organization, but in linguistics the alphabetic order is arbitrary.)

Deeper meanings.

With Key-letters, learners organically grow a vocabulary as large as they need to comprehend any text. I can most attest to its pedagogical application to Hebrew, which I and others have taught with for several decades. Students in my Hebrew program go from convert to Torah reader in weeks or months, not years. (But nit the tirah readers who din't know what *motzi* means. My students were the first I met who knew what *motzi* means.

²² In Chinrese, so-called "radicals" (i.e. the semantuc half of compound characters) are determinatives in the same sense as the Global Alphabet, the only difference being that they are not psornounced in these compoanfs. E.g. the MOUTH-radical appears in conpond characters for 'speak' whilw the HEART-radical appears in 'think.' WOMAN COMBINES with phonetic *Ma* 'horse' to give *Mama* 'mother.'

They surprise their teachers by guessing words in context that they have not learned. They don't learn by memorizing every word linearly, but rather enter into a more flexible, globally based, heuristic process, a SOLE or “**Self-Organized Learning Experience.**”

Global Alphabet learners are not limited to rigid, over-literal translations, as in traditional courses. On the contrary, they are more than able to achieve **depths of meaning** far beyond any linear knowledge of vocabulary. My favorite example of “deep meanings” is the interesting interpretation of “God created...” (the first verse of Genesis) as more deeply meaning “God created the universe **with wisdom.**” This is a traditional interpretation, based on a sophisticated textual comparison (the verse in Proverbs that says that “Fear of God is the **Beginning of Wisdom**”).

Especially relevant to our topic here, it is not only a traditional interpretation, but also an answer to a question on the final quiz in my one-credit “Hebrew alphabet” college course. The answer was given not by students who had had previous studied Hebrew: these students gave the literal translation. The innovative answer was given by Korean students, who had never studied Hebrew before (or perhaps had never read the Bible, even in English), on the basis of the Key-letter *R* in *Reshit* “beginning” whose second main meaning is “enlightenment,” as in *Rosh, Rav, toRah, moReh, oR, nerd, RuaH* “head, rabbi, teaching, teacher, light, candle, spirit.”²³ Mainstream approaches are not even to make such obvious connections as *neR* and *oR*, even with the notion of consonantal roots, since only the Global Alphabet backgrounds not only vowels but also prefixes and the “weak consonants” *h/y, w/v, n, t*. Inter alia, these “nonkeys” reveal the connection between Hebrew *oR/ner/toRáh* ‘light/candle/teaching’; and the names of the Israeli and Polish airlines *eL-aL* and *Lot. tehiLím, ‘psalms’ haLel haLluyah, voLare*.

The Mini-Lex has seven groups of Keys, each with two Main meanings. The 7 groups fit into two super-groups, based on the relationships between the first and second Main meanings. This Mini-Lex is then a short dictionary of any Semitic or Indo-European language. Linear-minded students will complain that it requires them to think-mote precisely to **tweak** the exact meaning, as if thinking is a defect in a learning system. Global, heuristic-based learning is of course more effective and more fun, even if linear learners resist it, implicitly preferring to learn many hundreds of roots one by one...or remaining in self-imposed blissful ignorance.

More recently, I have been using the Global Alphabet in workshops for stroke-survivors and other elderly, offering a “Safari” of words and ideas as a cure for the widespread “disease” of glossophobia” (fear of [foreign] languages,) with which most adults seem to be afflicted. The very simple idea of focusing on the first consonant in any word in conjunction with its meaning has been tried on partial aphasics in various languages, and has been found to be a helpful principle for enhancing effectiveness in vocabulary teaching and literacy (outweighing the natural tendency to focus on first letter-or the teacherly insistence on focusing on every letter).

More generally, the Global Alphabet reveals previously hidden connections by revealing the full symbolic nature of alphabets and the sounds that they represent. This Global approach provides, in effect, a Key to language, “cracking the code” of human language—more deeply, broadly, and more useably than Grimm’s Law,²⁴ not on the formal level of structural transformations like TG grammar, but by revealing the atoms of meaning of which lexical items consist: the 21 basic actions that are used literally or metaphorically, thus cracking the “Hidden Code” of human language— metaphorically in all lexical items, which are associated with the abstract phonemes that are the basis, via the Old Onomatopoeia from the Global Alphabet derives.

²³ The author is professor emeritus of Linguistics and Asian and Middle-Eastern Languages, with publications going back decades in linguistic theory, foreign language teaching, and Hebrew, including publications on his “Ley-letter Theory” of Hebrew in English and Hebrew, in America and Israel. His “language bazaar” offers short (and shorter) courses in 40 languages, guaranteeing “confident, continuous, comprehensible, and creative” (not native!) speaking abilities within weeks of study.

²⁴ E.g. establishing pairs like *Psternsl/Father, Triple/Three, Cardiac/Heart* as evidence for the Indo-European superfamily of languages. Unbeknownst to me, the *Suphr Yezirah*, composed in Tenth-Century Andalusia had suggested that letters are the atoms of reality and thought (as opposed to numbers, following the Pythagoreans. Their doctrines vulminated in the Information Age, while the *Sepher Yezirah* can be said to anticipate the Conceptual Age.

Human language is not in any way in a continuum with animal vocalizations, but all animal communication systems involve an initial expressive or onomatopoeic impulse, which can later be lexicalized to the extent and in ways allowed by the given animal cognitive system. Thus, the vocalizations of whales and dolphins tend to develop specific meanings and also specific “dialectal” variations for each pod, just as zebras have specific configurations of stripes that other zebras recognize.

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