CodeFinder Tutorial

(February 2007 revision) by Roy A. Reinhold

TUTORIAL INDEX (click on link to go directly to that section)

- **→ Introduction and Helpful Advice** pages 1-5
- **→ Guide to the Hebrew Letters** pages 6-9
- **→ Hebrew Transliteration Guide** pages 10-16
- Learning Just Enough Hebrew to Get By pages 17-18
- **→ Hebrew Vowelization Marks Guide** pages 19-20
- **→ Guide to the Aramaic Letters** pages 21-29
- **→ Preparing the Matrix and Report for the Web** pages 30-32
- **Lesson 1** pages 33-44
- **Lesson 2** pages 45-53

Hint: When you are reading this Tutorial in Adobe Acrobat Reader, press the page **Fit Width** button on the right to make the display use the entire screen width, it's easier to read. The center button is the **Fit Page** to display the entire page.

Doing A Simple Bible Code Search Procedure Using CodeFinder: ME

- 1. launch program
- 2. load a text to search (use yellow folder button)
- 3. enter an ELS range to search (e.g. -5000 to 5000)
- 4. enter the search terms with the bilingual dictionary, onscreen keyboard, or computer keyboard
- 5. hit the Search button to begin the search
- 6. go to Search Results to examine tree of results and display a matrix
- 7. analyze the results

Introduction and Helpful Advice

by Roy A. Reinhold

If a new user will do the two step-by-step Lessons in this Tutorial, they will learn how to fully utilize the functions of the software in a couple of days. However, if the new user chooses to ignore the Lessons, then they will almost certainly stumble around for 6 months trying to figure it out. My sincere advice is to do BOTH of the Lessons in the Tutorial.

The new CodeFinder: Millennium Edition version 1.23 Bible codes program gives the user very advanced tools to make the entire process of Bible codes research faster and easier. Some of the new cutting edge features and capabilities in version 1.23 are listed below:

- 1. Actual/expected numbers in search results. (in Search Results pane)
- 2. Faster import of saved searches.
- 3. Faster Matching.
- 4. Faster display of cached results.
- 5. Extra movable separator bar between search list and search results. (can resize the two panes in the main screen)
- 6. The search results instantly displays any changes that are made in the search list.
- 7. There is now **no limitation on the number of search terms** that can be entered, only the computer available ram memory limits it now.
- 8. **Spaces in terms**. (this is a huge change, since it allows your Hebrew terms that are multi-word to have spaces between the words in Hebrew, while still searching as if it were a long continuous string. The changes show throughout the program and in the matrix report).
- 9. The program **calculates the matrix odds automatically** and shows the odds in the matrix report. A few extra lines have been added in the summary at the bottom of the matrix; where it now shows total R-value and the matrix odds. An excellent new capability.
- 10. **Alternating Word Highlighting** (AWH) makes the surface text in the matrix alternate the words in black and gray so that one can easily recognize the surface text words in the matrix. To turn AWH on and off, a new menu selection called "Word Highlight" is under the Options menu. This works very well and is an excellent new function.

I especially like item 8 above, which allows me to have long terms with spaces between the words. If initially you enter a phrase as a single string without spaces, you can modify it and add spaces between words later using Search Parameters. Likewise, the Alternate Word Highlighting feature allows one to read the surface text (if you can read Hebrew) to discern any connections between the surface text and the matrix terms.

Before version 1.23, CodeFinder allowed the user to search in Hebrew, Greek and English texts. An addition in this latest version is the Peshitta Aramaic New Testament (NT) for search purposes. I and a

few others have been investigating the Peshitta Aramaic NT for codes for a few years and it looks promising; in fact, far more promising than the Greek NT manuscript. We've decided to make the Peshitta NT available now to everyone as a codes search text. Aramaic uses the same alphabet as Hebrew and many of the root words are the same. What is different between Hebrew and Aramaic are the proclitics, which are the prefixes and suffixes added onto the root words. There is no English-Aramaic dictionary in CodeFinder, because there just aren't any freely available that we could use. Therefore, those desiring to search in the Peshitta Aramaic NT will need to obtain their own bilingual dictionaries and learn on their own about Aramaic word structure and grammar. We don't know yet whether codes in the Peshitta Aramaic NT are Aramaic or Hebrew or a combination. Aramaic was the language in Israel at the time the New Testament was written.

Search Texts Available in CodeFinder: Millennium Edition			
genesis.cod	Hebrew (book of Genesis)		
GreekNT.cod	Greek (Stephens 1551 Greek NT)		
kjvnt.cod	English (King James Version NT)		
kjvot.cod	English (King James Version OT)		
mobydick.cod	English (entire Moby Dick novel)		
tanach.cod	Hebrew (entire Tanach or Old Testament)		
tanachcontroltext.cod	Hebrew (electronically scrambled Tanach)		
torah.cod	Hebrew (first 5 books of the Bible)		
torahcontroltext.cod	Hebrew (electronically scrambled Torah)		
Warandpeace.cod	Hebrew (shortened to Genesis length)		
peshitta.cod	Aramaic (entire Peshitta Aramaic NT)		
peshittacontrol.cod	Aramaic (electronically scrambled Peshitta NT)		

- 1. The electronically scrambled search texts are for those who want to look in a statistical control text for the same matrix.
- 2. Alternate Word Highlighting is available for the Hebrew Torah and Tanach, and the Peshitta Aramaic NT.
- 3. No one is saying that there is a valid code in the English KJV Old and New Testaments, but they are useful and fun for practice in learning how to use the software.
- 4. The order of books in the Hebrew Tanach is different than the English Bible. Likewise, the Peshitta Aramaic NT has the order of books different than the English Bible and Greek NT.

Is it possible for a beginner with absolutely no knowledge of Hebrew to search in the Bible codes and find a matrix? Yes, with the help of the built-in bilingual Hebrew-English dictionary in CodeFinder. The printed Ben-Yehuda's Pocket Hebrew-English and English-Hebrew dictionary would also be helpful; and it is very inexpensive, widely available, and better than most other more expensive printed dictionaries. The *Guide to the Hebrew Letters* in the next section in the Tutorial also helps in introducing the user to the Hebrew alphabet. That's followed by an extremely important section called, *Guide to Transliteration of Names*. We translate regular words with a dictionary to go from English to its Hebrew equivalent word; meanwhile, we transliterate names of people and place names from English to Hebrew. The Transliteration Guide in this Tutorial will teach you how to transliterate names

What about going on from a basic level of finding a simple matrix whose equidistant letter spacing (ELS) terms are single words, to a more advanced level of finding ELS terms that are phrases or sentences as done by more advanced codes researchers? If you've seen me (Roy) on various Bible code TV specials or read my more recent Bible code matrix articles, you'll see that my matrixes are comprised of terms that are all phrases and sentences. That's a higher level that takes the Bible code beyond the possibility of chance occurrence in the universe (scientists use 1 chance in 10 to the 50th power as the upper level of chance occurrence in the universe; and many use 1 chance in 10 to the 25th power as the limit for chance occurrence).

How does one acquire the necessary skills to do more advanced Bible code matrixes using phrases and sentences? First, finding a Bible code matrix is no different for a beginner than it is for an advanced Bible code researcher. We decide on a matrix theme, and then list possible words which fit the theme for our desired matrix. The next step is to translate those words to Hebrew (for searches in the Hebrew Torah and Tanach) and type them in as search terms. The software looks for all occurrences of each term in our search list, and matches them to the occurrences of the main/key term, which is the first term in our search list. Not only does it automatically match the terms; but then the software automatically sorts the results from highest number of matches to lowest. In this way, the software does an incredible amount of work that had to be done manually in the past. That's how we find a matrix.

An advanced Bible codes researcher then goes on to further develop the matrix by "snooping" each individual word ELS term in the matrix, to see if it forms a longer phrase or sentence on the theme of the matrix. Snooping is merely writing down on paper the term, with the letters before and after it at that ELS, and then trying to separate the letters into words that form a sentence on the desired theme. However, since we are generally working in Hebrew (a valid code in Aramaic or Greek or English is entirely theoretical, while the Hebrew Bible code has been largely proven by all the many extensive matrixes), the problem of working in Hebrew arises. Anyone can go beyond the beginner level, but it requires learning Biblical Hebrew Grammar.

How can one learn Biblical Hebrew Grammar and why the distinction of Biblical versus Modern Hebrew? We've found through many Bible code matrixes, that the Bible code is primarily in

Biblical Hebrew and not modern Hebrew. Logically, that makes sense. Yes, there is usage of many modern words like airplane and computer and electricity, etc., but the Bible code is primarily Biblical Hebrew. Modern Hebrew in Israeli newspapers and magazines often uses a different spelling for the same word when compared with Biblical Hebrew's more compact spelling. After one learns the 22 letters in the Hebrew alphabet, then a person can go on from there to learn Biblical Hebrew Grammar, if desired, so that you can develop matrixes with phrases and sentences. You can learn this at home by doing 1 to 2 lessons a week, and complete the entire curriculum in 6 months or so. In the following article on the Codes in the Bible website, Recommended Publications For The Bible Code, I list the necessary books to learn Biblical Hebrew Grammar at home as self-study and mention where you can get the books at a very nice discount. This advice is for those who want to go on to an advanced level in the Bible code; but it is not necessary to initially find code matrixes. You can do that with the materials at hand. Just do the two step-by-step Lessons to learn how to use the software, and then utilize the Tutorial Transliteration Guide and the built-in 110,000 word bilingual Hebrew-English dictionary that comes with CodeFinder.

Some new users write and ask about toggling the Hebrew matrix to English. Technically, that's not possible. English has 26 letters in the alphabet and Hebrew has 22 letters. Some English letters require 2 Hebrew letters to transliterate the sound, and conversely some Hebrew letters require 2 English letters to transliterate the sound. Also, in English all the letters are shown in words, while in Hebrew the short "a" and short "e" sounds are assumed (no letter in the word). For all these reasons, it is not possible to accurately build software that toggles the Hebrew matrix to English. Additionally, Hebrew sentence structures are different than the normal English sentence with subject-verb-object. Therefore, even if we could change the letters in a matrix to English from Hebrew, the sentence structure would be foreign to those without knowledge of Biblical Hebrew Grammar sentence structures.

Having been at this Bible codes research for many years, I find that people tend to resist even learning the 22 Hebrew letters. They are merely 22 symbols that can be easily memorized in a couple of days. One section in the Tutorial explains how to make home-made flash cards to quickly memorize the letters. Try it! Or you can download the free Hebrew Alphabet Quizzer program to learn the letters.

You'll be fascinated at all the things you can find in the Bible code—I know I still am amazed all the time. Just remember that with the software, Bible code research has been made available to the average user due to the advanced software capabilities. You just need to do the Lessons to learn how to utilize the software. Then make up flashcards and memorize the Hebrew letters—or else how would you even know whether you made a spelling mistake?; or how would you know what you have in front of you?

The third area, besides learning the software and learning the Hebrew letters, is learning Bible code theory. Fortunately, this is made easy because you can visit **websites like Codes in the Bible** and see many matrixes. This will help you understand the relationship and interplay between ELS terms. After doing the Lessons, try duplicating a couple of matrixes and you'll understand how to do everything.

click here to go back to the Index page or continue on to the next section

Guide to Hebrew Letters

by Roy A. Reinhold

Hebrew Aleph-Bet and Letter as Numbers

Letter Name	in Hebrew	Keyboard Letter	Pronunciation	Number Value
aleph or alef	א	T	<u>ah</u> -lef	1
bet (& vet)	ב	C	bet	2
gimel or gimmel	J	D	gee-mel	3
dalet	Т	S	<u>dah</u> -let	4
hey or heh	ה	V	hey like say	5
vav	٦	U	vahv	6
zayin	T	Z	<u>zah</u> -yeen	7
chet or khet	Π	J	khet	8
tet	ប	Y	tet	9
yud or yod	٦	Н	yood like wood	10
kaf	כ	F	kahf	20
lamed	ל	K	<u>lah</u> -med	30
mem	מ	N	mem	40
nun	נ	В	noon	50
samech or samekh	ס	X	<u>sah</u> -mekh	60
ayin	ע	G	<u>ah</u> -yeen	70
pey or peh (& fey)	9	P	pey like hay	80
tzadi or tsadi	צ	M	<u>tzah</u> -dee	90
quf or kuf	7	E	koof like roof	100

resh	٦	R	resh	200
shin	W	A	sheen	300
tav	ת	, (comma)	tahv	400
kaf sofit	Ţ	L	kahf <u>so</u> -feet	
mem sofit	ם	O	mem <u>so</u> -feet	
nun sofit	l	I	noon <u>so</u> -feet	
fey sofit	q	; (semi-colon)	fey so-feet	
tzadi sofit	γ	. (period)	tzah-dee so-feet	

NOTE: the above English keyboard letter for the Hebrew letters are for the standard Hebrew keyboard. There are Hebrew fonts floating around that are non-standard (mostly on Macs). In pronunciation, with words with two syllables, the underlined portion is emphasized. The letter "pey or fey" is always "fey sofit" when at the end of a word, the "f" sound.

The sofit letters sound the same as the normal letters (except pey-fey); but are used when they are the last letter in a word in the Bible text. For Bible code purposes, the regular letter and final letter are fully equivalent. In other words, in the code, a nun sofit could appear in the middle of a valid term and the regular letter nun could be at the end of an ELS coded word. To recognize the sofit letters, on four of them the vertical stem extends below all the other letters in the Bible text. In CodeFinder, when you type a sofit letter in an ELS term, it shows up as the normal letter, since the program uses only regular letters for many reasons (speed is one, and clarity of use is another).

If the Hebrew letters only go to 400, how can one look for a higher number in the Bible code—like the year 1998 (5758)?

For numbers over 1000, use the thousands letter as a digit. For example, 1561 would start out with "aleph" **X** which is 1. If the number were 3561, then the first letter would be "gimel" **J**, which is the 3. Examples:

Note that the higher numbers go first in all instances. There are two special cases which are avoided in normal use by Orthodox Jews (non-Jews can look for both ways). For 15 use (9 + 6) 10

instead of the normal (10+5) Π . For 16 use (9+7) Π instead of (10+6) Π . These special case substitutes avoid use of part God's personal memorial name (yud hey vav hey, Π) which is one of the 10 commandments, "to not utter the name of the Lord in vain, or write it casually."

The year 1998 was 5758 in the Hebrew calendar (at least the first 9 months until Rosh Hashanah). 5758 was hey tav shin nun chet (5, 400 + 300 + 50 + 8) $\Pi J U \Pi$ 1998 is corrected to 758 and is tav shin nun chet (400 + 300 + 50 + 8) $\Pi J U \Pi$

A correction is applied to the Gregorian year number so that the letters are the same as in the Hebrew calendar year, less the 5000 letter (hey). The current correction number is 1240 used from the mid 1800's to sometime in the 2000's. The correction is subtracted from the Gregorian calendar number. (1998-1240 = 758). Notice above that the letters for 5758 and 1998 are the same except for the leading letter hey \$\overline{1}\$, which is the 5000 digit. In practical application, the longer term above with the leading hey, ALWAYS means the Hebrew calendar year that runs from Fall to Fall (starts at Rosh Hashanah). Meanwhile, Israeli newspapers and magazines may use the short version without the leading hey, to mean either the Gregorian calendar year or the Hebrew calendar year. Keep that in mind when doing a codes matrix, although it more correctly means the Gregorian or Calendar year (the short version).

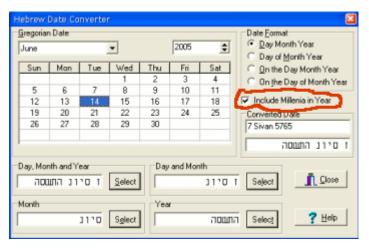
The year 2007 is corrected (2007 - 1240 = 767), tav shin samech zayin Tuun The Hebrew year 5767 is hey tav shin samech zayin Tuun Special case:

alpayeem is "2000" and shnat alpayeem means "calendar year 2000." שנת אלפיים

There is one occurrence of the term "shnat alpayeem" coded in the Torah, which probably shows the events of Gregorian year 2000. The word for 1000s is alafeem.

\[\begin{align*}
\text{STREET PROBLEM STATES A PROBLEM STATES A

Note: The Graphic to the right shows the Hebrew Date Converter window, selectable under the Tools menu in Codefinder when a Hebrew search text is loaded for search. Notice that you can use the check box "Include Millenia in Year" which allows (or not) the leading thousands digit for the year. All the above information explaining the year is to prepare the user to correctly apply this capability for a Hebrew calendar year or Civil calendar (Gregorian) year for search.



Adding Leading Consonants (prepositions) on Hebrew Words:

In Hebrew, you can add leading consonants as a prefix to a word to expand its meaning. The following are some the Hebrew prepositions:

<u>letter</u>	pronunciation	meaning
ל	(le)	to, to a, for, for a (unto), towards
⊒ ·	(be)	in, at, in a, at a, by, with, sometimes in the Bible (when, among, on)
ל	(la)	to the, for the
⊒ ·	(ba)	in the, at the
⊃	(khe)	as, like, about, according to
1	(ve)	and, and the, but, then
П	(ha)	the
U	(she)	that, which, who (not a question), in order to
מ	(mee or me)	from, out of, than (rather than), because of
כש	(kshe)	when (not a question)

click here to go back to the Index page or continue on to the next section

Transliteration Guide

by Morris Shak and Roy A. Reinhold

One of the more difficult areas in Bible code research is in the area of transliterating names of people and places from English to Hebrew. Most people have little trouble with translation of words, because a printed bilingual dictionary, or the one included with the CodeFinder software program, makes it very easy. For example, we look up the word love in the dictionary and quickly see that the Hebrew word is ahavah

However, the purpose of transliteration is to make a name sound the same in Hebrew as it sounds in English. We are not concerned with the meaning of the name, only that it sounds the same. Transliterations are used for first and last names of people, and names of cities, states, and countries. The problem arises in the transliteration process because Hebrew has 22 letters, while English has 26 letters. Also, Hebrew has 5 vowel sounds, while English has 5 vowels; but each vowel in English can also have long and short vowel sounds and even some special case sounds. The result is that when transliterating names, we can sometimes come up with two, three, or more possibilities. In those cases, the best you can do is look for all possible transliterations in the Bible code.

The table below is a guideline to help the new Bible code researcher in transliterating names. It is not to be considered the absolute rule to follow, but will cover most cases. A full explanation for use of vowels has been added after the table below. Read Hebrew right to left.

English letter	<u>example</u>	sound	Hebrew equivalent
short A	bat	ah	assumed, or X or U
long A	Kate	a	וו or וו
В	best	b	ב
soft C	city	S	o or U
hard C	carry	k	or ס
soft CH	cherry	short sh	u or y
hard CH	christmas	kh	П ог Э
D	Daniel	d	Т
short E	bet	e	assumed, or \aleph or \upmu
long E	mete	ee	ר
special E	fern, bird, burn	u	1
F	Fred	f	9
soft G	gem	hard j	ן or מי or סי
hard G	gold	g	ג

Н	Harry	h	Π sometimes Π
short I	bit	i	7
long I	bite	I	וו _{or} ו
special I	bird, fern, burn	u	ו
soft J	jahvol (German)	y	י ז
hard J	Jack	j	ן or א or א
K	Karen	k	or 7 or 7
L	large	1	ל מי מי
M	Maurice	m	מ
N	Nathaniel	n]
short O	Dot	ah	assumed, or X or U
long O	Roland	0]
double O	boot	u	1
P	Perry	p	9
Q	Qatar	k	ק
QU	Quentin	kw	קו or קוו
R	Roy	r	٦
S	Samuel	S	U or sometimes U
special S	his	Z	T
special S	visual	Z	T
SH	Shannon	long sh	W
T	Terence	t	v or n
TH	Thomas	t	π
TH	they	th	Л
short U	Dunkirk	uh (ah)	assumed, or X or D
long U	Buford	u or oo	1
special U	burn, bird, fern	u	1
V	Victor	V	1 or 1
W	Washington	W	11 or sometimes 1
X	axe	ks	כס or כס
special X	exact	gz	ג т
Y	yellow	y	٦
vowel Y	silly	ee	٦
Z	Zachary	Z	T

Diphthongs			
English	<u>example</u>	<u>sound</u>	Hebrew equivalent
ai	wait	ah+ee=a	ר _{or} ער _{or} אר
au	caught	ah + oo	ו סר עו אר or סר
ay	tray	long a	ר or ער or אר
ea	heat	ee	٦
ee	beet	ee	ו
ei	weigh	eh+ee=a	ער or עו or עני
other ei	Einstein	I	וו _{or} ו
eo	theocracy	eh+ah	assumed + R or D
eu	Deuteronomy	eh+oo	עו or או or עו
ey	grey	long a	ר or ער or אר
ia	giant	I + ah	יע or רא
ie	Brien	I + eh	יע or יע
oa	boat	long o	٦
oi	oil	o+ee	וי
00	boot	oo or u	1
ou	bought	ah+oo	1
oy	boy	o+ee	וי
ui	intuit	oo+i	ון
uo	buoy	oo+ee	ון
uo	duopoly	oo+ah	וה or וא or וע
uy	buy	I	רר or רו
words ending in ah	Hannah, Sara	ah	ע or א or ע

Hebrew only has 5 basic vowel sounds: ah, eh, o (long o), oo, ee. Actually, aleph and ayin (N and D) always indicate a vowel sound. Technically they are not vowels as in English, but are called **stops**. A stop indicates that a vowel sound should be pronounced. The above table indicates letter usage when a vowel sound is in the middle of a word, but is misleading to people when you have a leading vowel sound or ending vowel sound. The following text with examples, more fully explains the special cases. This will help you do better transliterations. Although I am just covering the transliterations of names here in our examples, the same rules hold true for transliterating the names of countries, states, etc.

Leading Vowels

Internally in a transliterated name, we use the vav ($\ 1$) for the long "o" or the long "u" (oo) sound. Likewise, we use the yud ($\ 1$) internally in a transliterated name for the long "e" (ee) sound. The mistakes, I've seen people make, are in transliterating a name like "Omar", when they begin the transliterated name with a vav ($\ 1$) for the long "o". The truth is that **if you start a transliterated name off with a vav or yud, they are used as consonants and not vowels. You need to start a name that begins with a vowel sound with a stop.** The stop tells you that a vowel sound is pronounced. The stop is either an aleph or an ayin ($\ \aleph$ or $\ \mathfrak{D}$). If the stop is not modified with a vav or a yud ($\ \mathsf{T}$ or $\ \mathsf{T}$), then it is the "ah" or "eh" sound. Examples are Amanda, Edgar, Oscar, etc. (note: some people will want to use a long O in Oscar, you can try it, but the normal English pronunciation is a short O sound). If the name starts of with a long "o" or long "u" (oo), then the stop is modified with a vav. Examples are Oakley, Olga, Uri, etc. If a name starts with a long "e" sound, then the stop is modified with a yud ($\ \mathsf{T}$). Examples are Edie, Edith. The final case for a leading vowel sound are those names that begin with a long "I" sound like Eileen or Ida. You can either use a stop plus a single yud, or a stop plus a double yud. Here are the transliterated spellings for our examples (some have more spelling possibilities than shown).

```
Omar
     אומר
             עומר
Amanda
       אמנדה
                עמנדה
                        אמנדא
                                 עמנדא
Edgar
      עדגר אדגר
Oscar
      עסקר אסקר
Ulary עוקלי אוקלי
     עולגא אולגא עולגה אולגה
Olga
    עורי אורי
Uri
     עידי אידי
Edie
Edith
     אידית
             עידית
Eileen עירלין אילין אילין (last letter is nunsofit, use nun בוו)
    עיידה איידא עידא אידה
Ida
```

Vowels in the Middle of a Name

Almost all the time, the ah (a) or eh (short e) sounds in the middle of a word in Hebrew is assumed. That means that you do not use a stop for the ah or eh vowel sounds when transliterating a name. Examples are Hannah and Ben. The long o and oo sounds are shown using the vav (1) when they are in the middle of a word. Examples are Roland and Ruth. The ee sound (long e) is done using a yud (1), and an example is Peter. No stop is required in the middle of a name when using a vav or a yud, the stop is assumed. A long "I" in the middle of a name is done using an assumed stop plus a single yud or a double yud, and examples are Dianne and Michael. The name Diane or Brian brings up another point, which is that you have to use a stop after the yud for the "I" in order to tell readers that both vowels internally in the name need to be pronounced. Here are the transliterated spellings for our examples (some have more spelling possibilities than shown).

```
Hannah בה הנא הנה הנא הנה הנא הנה הנה הנא הנה הנח מוחת בחוד הווחת בחוד (spelled with a chet, is the Biblical spelling)

Roland רולנד

Ruth רות פיטר

Peter פיתר פיטר סיטר both have a nunsofit on the end as shown

Michael מיכאל (Biblical) מיכאל (Biblical) מיכאל דיען דיאן

Diane דיען דיאן

Brian ברייאן בריען בריאן
```

Below are a few more examples of names

```
Ann ען אן
Charles צרלס שארלס שרלס
Harold הרולד
Roy רוי
Douglas דגלס דעגלס דאגלס
גכי גקי יכי יקי
George גורג
```

Notice that the A in Ann can be either an aleph or an ayin. With the name Charles, there are two things to notice. One is that the "e" is silent, so there is no letter there for "e" in Hebrew. Secondly, the "a" in Charles can either be there or assumed, and if we place a letter for the "a" in Charles, it is an aleph or an ayin. Sometimes the tzadi is used for the soft ch sound.

Harold is a good example of using the sound instead of a letter. When we say Harold, the a sounds like an e, so we assume it in Hebrew and place no letter for the a. Douglas has a dipthong "ou" but the name is pronounced like the "ou" is "uh". It is not used like in "through". I just wanted to point this out, because English is sometimes more difficult than Hebrew. We use a lot of nonstandard sounds for vowels in English, whereas in Hebrew there are just those 5 vowel sounds.

Vowel Sounds at the End of a Name

There are a few special cases to be applied when a name ends with a vowel sound, like Sara. One is the letter hey (\sqcap) , which if used at the end of a word is "ah" and not just "h". The same is true of the letter chet (\sqcap) , which if used at the end of a word is "akh" and not just "kh". Finally, if kaf-sofit (\sqcap) is used at the end of a word, it can sometimes be "kha or ka" rather than just "kh or k" (male versus feminine ending). An example is "kamokha" $(\sqcap \sqcap \sqcap)$ which means "like yourself").

Where a vowel sound is used at the end of a name, it requires a stop (aleph or ayin, \aleph $\ D$) or a hey \sqcap (if the name ends in the "ah" sound), except for the special cases where a word ends in kaf-sofit. Aleph at the end of a name can be either "ah" or short "e"; while by convention ayin is only the "ah" sound and not a short "e". Some examples of names ending in vowels follow:

Canada קנדה Sarai (Abraham's wife) שרע סרע סרא שרא סרה שרה Sarah שרע סרע סרא שרא סרה שרה Penny פני Moldavia מולדויא מולדביע מולדביא Hutu הותו הוטר Bobo

Biblical Hebrew versus Modern Hebrew

One of the many arguments among early codes researchers was on the use of Biblical Hebrew over modern Hebrew. Modern Hebrew is more standardized, following a stricter set of rules. In Biblical Hebrew, many times the long O sound didn't use a vav, as in the name Moses (actually pronounced Moshe in the Bible, TUD). Codes research has now confirmed, through many complex matrixes, that the Bible codes are mainly in Biblical Hebrew. We formerly thought it leaned toward using the more stricter modern Hebrew usage, which leaves less wiggle room on spellings.

There are many examples where the same word is spelled in more than one way in the Bible and sometimes in modern Hebrew too. In the Bible, at some places one may find a word spelled with a yud and at other places the same word without the yud. The same holds true for use of the vav in the Bible, sometimes with a vav, and the same word in other places without. Since we are still in the early learning stages in knowledge of the Bible code, one ought to know that there are more variables to look at, if one considers the possibility of spelling variations according to the Biblical model.

What is the right answer for the purpose of Bible code research? One must try to look for both versions for each occurrence of the word. For example, the name Morris is typically spelled with a vav in all Hebrew print (for the O sound). I was surprised to find Morris in my matrix spelled without a vav, and there are several factors that indicated that this is no coincidence. (There was even a sentence at an ELS of 16 saying, "borrowed a foreign name", the year, month and day it was done, etc.) As stated above, we now know that the Bible code is primarily in Biblical Hebrew.

What Name Do I Look For?

How many ways can a person's name appear in the matrix? It can appear in several ways for each of the following categories: FirstName, NickName, FirstNameL (L is the first letter of the last name), FirstNameI (initial of middle name), LastName, Acronym, and FirstNameLastName, etc. There is also

a unique version for a two-word name. Look for both names, one on the row immediately above the other, and both have the same ELS. They could also be crossing or closely parallel.

When preparing a matrix for a specific person, where the correct version of the name in Hebrew is known, start by using full Hebrew name(s) to establish the matrix. When doing a matrix on historical persons, remember that many well-known people changed their names (just as many modern actors have both a stage name and their real name). You might have to do some research and find out the historical figure's birth name. Then look for their birth name and more-well-known-later-name.

If you are new to the Bible codes, it should not be too hard for you to learn enough Hebrew to get by. What is required is that you memorize the 22 Hebrew letters and learn the vowel sounds. Take a look at the page in this tutorial on *Learning Just Enough Hebrew to Get By*. You don't need to learn to speak Hebrew well in order to do credible Bible codes work. You'll learn a lot of Hebrew as you are working on the Bible code (provided you memorize the letters as a start, so that they don't look like strange symbols to you anymore).

click here to go back to the Index page or continue on to the next section

Learning Enough Hebrew to Get By

by Roy A. Reinhold

Everyone starts out in the Bible codes by getting enthused about all the amazing discoveries in the Hebrew Bible code. They look around and buy a Bible codes software program, and then are confronted with a lot of expectations which seem daunting to them. Actually, when you start out you are really learning in 3 distinct new areas; and the Bible codes software program only provides one of the 3 pieces. The 3 areas you need to learn are:

- **1. Bible codes theory** this includes all the terms like equidistant letter spacing (ELS), search terms, vertical terms, matrix ELS, term ELS, Torah, Tanach, etc. It includes knowledge of what a matrix is and what it is not, and some knowledge of what others have proven in the Bible code.
- **2. Bible codes software programs** in the last 10 years Bible code software programs have greatly advanced and are 1000 times faster, more capable, and easier to use. However, you still need to learn the functions of the program in order to use it. Bilingual dictionaries, onscreen Hebrew keyboards, automatic matrix determination, multi-dimensional row-splitting, and more functions are applications of the latest research discoveries in the Bible code. In CodeFinder: ME, the HELP is built as an online manual to show you program graphics, and explain the functions of the program. You need to put it all together to be able to do good codes searches. This Tutorial is a means to teach you a methodology to do intermediate level codes searches.
- **3.** The Hebrew language the Hebrew letters seem like a large stumbling block to new users unfamiliar with Hebrew. The fact is, you do not need to take a class in Hebrew, or speak Hebrew fluently in order to do credible codes research. What you do need to learn are the Hebrew letters. Hebrew is less complicated than English, and is entirely phonetic; once you know the Hebrew letters, Bible codes searches become much easier. Later, to advance to doing sentences in the codes, you will need to learn **Biblical Hebrew Grammar and it can be by self-study** (link to article).

Just how much Hebrew do you need to learn to get by in Bible codes research? The answer is that you need to memorize the 22 letters of the Hebrew alphabet (actually aleph-bet), and also the 5 end letters. The 5 end letters are variations in shape when these five letters are used at the end of a word (kind of like the way we use capital letters in English) and are called **sofit** letters.

Here is the secret to advancing rapidly in doing Bible code searches. You need to memorize the Hebrew letters just as a first grader would, through rote memorization. No, you don't need to go out and buy a Hebrew training software program or book. I have helped many people get started in the Bible code in the right way, and I make the following claim from experience, "You can learn the Hebrew letters in 2-7 days."

In order to use rote memorization of the Hebrew letters, you need to humble yourself to being a first grader for a week. Teachers of first graders stand in front of the class and point at letters as the class repeats them. They do this every day until the class can say all the letters of the English alphabet.

Then they do them in a mixed up way to ensure that the class knows each letter when they are not in order. You will do the same thing with the Hebrew letters, except that you won't have a teacher with a pointer pointing to them and asking you the name of the letter.

Get 27 3x5 index cards, with or without lines on them. Then put the Hebrew letter on one side written in large size, and on the reverse side put the name of the letter. You are creating a set of home-made flash cards at little or no cost (no cost if you already have some index cards, a little cost if you have to buy some). Make a card for each of the 22 Hebrew letters and a separate card for each of the 5 end letters, so you'll have a total of 27 flash cards. When making up the flash cards, make sure you recognize the difference between letters that look closely like another letter. These are:

resh ¬ and dalet ¬ and kaf sofit ¬

The top part of the resh curves around from the vertical stem. [7] While in dalet the top is abruptly perpendicular to the vertical stem, and most of the time the top horizontal portion extends to the right of the vertical stem a little ways. [7] Kaf sofit has a longer vertical stem [7].

vav 1 and nun sofit 1 and zayin T

The vav and nun sofit are very close except that nun sofit has a longer vertical stem. The top part of the zayin extends on both sides of the vertical stem.

hey Π and chet Π and tav Π

The hey is open on the left side, while chet is like a square n. Tav has a hook in the lower left.

samech U and mem sofit U and mem D

The samech is rounded, while the mem sofit is square. Mem has an opening on the bottom.

ayin D and tzadi Z and tzadi sofit ?

The ayin has a tail that slants left, while the tzadi goes either in the opposite direction then hooks to a horizontal bottom, or it goes straight down from the y and then hooks to a horizontal bottom. The tzadi sofit end letter has a longer vertical stem and goes straight down from the y.

bet 1 and kaf 1

The bet usually has a heavy, double thickness flat horizontal bottom, while the kaf is like a squared backwards c and is rounded.

To make up your set of flash cards, use the Guide to the Hebrew Letters in this Tutorial, where the letters are all shown with their names. Learn them in the correct order first, then mix them up and practice with your flash cards a few minutes throughout the day. Repetition and saying them out loud helps. Here is a <u>link for a FREE software program to learn the Hebrew letters</u> and to hear them pronounced correctly by an Israeli.

You'll be surprised how quickly you can memorize the Hebrew letters. The next surprise is that you'll immediately be able to read Hebrew, because you already know how to read, and can phonetically pronounce the letters in Hebrew. You will have to learn the "nikud", those strange vowel markings around the letters in the printed Torah and Tanach text. However, the nikud (vowelization marks) are within your capabilities too.

click here to go back to the Index page or continue on to the next section

Hebrew Vowelization Marks Guide

by Roy A. Reinhold

The vowelization marks in the Hebrew masoretic text of the Torah and Tanakh were invented by the masoretes in Tiberias. They applied the nikud (vowelization marks) to the text of the Tanakh in the 7th to 8th centuries AD. From history, you may remember that the Romans defeated the rebellious inhabitants of Israel in 70 AD and burned the Temple. Another rebellion took place in 135 AD, called the Bar Kochba Rebellion, and after thoroughly defeating the Jewish people, most were either taken as slaves or dispersed throughout the known world of the time.

The masoretes (traditionalists) in Tiberias along with those in Jerusalem and Babylon, undertook a project to salvage Jewish identity and knowledge of the scriptures. The nikud enabled Jewish people anywhere in the world, the knowledge to properly pronounce Biblical Hebrew. This was at a time when Hebrew was a second or third language to most dispersed Jews, if they knew it at all.

Is knowledge of the nikud נדוק (m. plural is nikudim, f. is nikudot) necessary to do good Bible codes research? No, not really, since you do not need to be able to read the Hebrew Tanakh well in order to do Bible codes research. However, knowing the Hebrew letters IS NECESSARY in order to get far in the Bible codes; and I thought it would be good to have a reference on the vowelization marks. That way you have enough knowledge, when viewing the Hebrew Tanakh, to be able to read it as well as anyone.

A short review of vowels is relevant here. There are only 5 basic vowel sounds in Hebrew: short 'a' as in aha, short 'e' as in bed, long 'e' as in beet, long 'o' as in vote, and long 'u' or 'oo' sound as in flute and boot.

The information is taken from the Oxford English-Hebrew Dictionary (1996 edition, pg ix) and Ben Yehuda's Dictionary (page iv).

What is important to remember with regards to the vowelization marks, is the vowel sound itself associated with the symbol, and not necessarily the name of the symbol. In pronunciation of the name of the symbol, the standard accepted usage is that an 'a' is a short 'a' sound, an 'e' is a short 'e' sound, an 'i' is the long 'ee' sound, an 'o' is the long 'o' sound, and a 'u' is the 'oo' sound. Also, the 'ch' is a hard 'ch' as in christmas, the 'kh' sound. All vowels are pronounced, so that the Male in Cholam Male, is two syllables, ma'le.

NAME	SYMBOL	Approximate Phonetic Value
Kamatz	טָ	a as in father (long vowel)
Chataf Kamats	יוָל	o as in stop (short/half vowel)
Patach	עֿ	a as in father (short vowel)
Chataf Patach	រ្វ៉ា	a as in father (short/half vowel)

Tsere	טֿ	e as in bed (long vowel)
Tsere Male	תֵּי	e as in they (like long a, long vowel)
Segol	ນ	e as in bed (short vowel)
Chataf Segol	ນື່	e as in bed (short/half vowel)
Chirik	ù	ee as in tee (short vowel)
Chirik Male	תִּי	ee as in tee (long vowel)
Cholam	ת	o as in vote (long vowel)
Cholam Male	i	o as in vote (long vowel)
Kamats Katan	נֿי	o as in vote (short vowel, rare)
Shuruk	7	u as in rule, oo as in boot (long vowel)
Kubuts	ν̈́	u as in rule, oo as in boot (short vowel)
Shva	עֿ	consonant with no vowel force (shewa)
Dagesh	פֿבּכ	pey-bet-kaf with dagesh, changes kaf to haf, bet to vet, pey to fey without dagesh.

Important note: Kamats Katan is rarely used, but looks like Kamatz. There are two major dialects in Hebrew, Sephardic and Ashkenazi, leading to slight differences in pronunciation. Ashkenazi comes from middle and northern European Jews and is predominant in schools in Israel. Sephardic is from Jews who lived for centuries in countries with Arabic language, so it has Arabic like features (example: Tsere is pronounced like a long a (they), in Sephardic).

Long vowel-short vowel-half vowel: Refers to the length of pronunciation. Long vowels have the longest time enunciation, short vowels are spoken more hurriedly, and half vowels are spoken even more hurriedly.

You really can learn to read the Hebrew Torah and Tanakh correctly by knowing the nikud (vowelization) marks above. In normal Hebrew in Israel, you will not see the vowelization marks. It's only done for children's books to teach them, in the Torah and Tanakh, and in Hebrew prayer books.

Make up a set of flash cards for the nikud. Use a Hebrew letter like mem with the nikud added on one side and the sound of the mem with the nikud added on the other. Just learn the sound from each.

click here to go back to the Index page or keep going to go to the next section

Guide to Aramaic Letters

prepared by pastor Glenn David Bauscher

This new section of the Tutorial on Aramaic will help the beginner in Aramaic get started on the right foot in doing Bible codes research in the Peshitta Aramaic New Testament. With the new version 1.23 of CodeFinder: ME, we are including the Peshitta Aramaic NT as a search text for codes. Previously, this search text was available to a select group of less than 20 people, who did the basic preparation and research to determine whether codes might exist at all in the Peshitta Aramaic NT. Pastor Dave Bauscher has found extensive (lengthy) codes in the Peshitta Aramaic NT; therefore, we feel it is the right time to make the search text available to everyone.

The prospects for extensive Bible codes in the Peshitta Aramaic NT is an exciting new area in the Bible codes, and findings to date warrant widespread research into the Peshitta text. We'll let others fight over whether the Greek NT is the original or whether the Peshitta Aramaic NT is the original manuscript. Based on good Bible code findings in the Peshitta Aramaic NT and no good Bible code findings in the Greek NT manuscripts (5 different manuscripts), from a Bible codes research angle, the Peshitta Aramaic is the original New Testament text. Historical footnotes bear this out where Bishop Papias as well as Jerome and Irenaeus wrote that they had seen the original for the book of Matthew (and it was Hebrew/Aramaic); and Bishop Papias wrote that the apostles had translated Matthew from the original into Greek. Bible codes research lends credence to the idea that the Peshitta Aramaic NT is the original NT manuscript and the Greek is a translation. (the following is by Dave Bauscher).

Aramaic is a Semitic language and uses the same alphabet as Hebrew and Arabic. It is found in inscriptions dated 1600 BC, so it is at least as old as Hebrew, if not its progenitor. The language is named after Aram and his people mentioned first in Genesis 10:22: "The children of Shem: Elam, and Asshur, and Arphaxad, and Lud, and Aram." These became the Aramaean peoples known also as the Syrians. Asshur, Aram's brother, fathered the Assyrian people, who also adopted Aramaic as their tongue very early in its history. Genesis 31:49 has an Aramaic name, אור שהדותא Yagar Shahadutha, which Laban—Jacob's father-in-law—called a pile of stones they built as a witness to an agreement Jacob and Laban made concerning Laban's daughters and cattle. The date of this encounter is approximately 1740 BC. Clearly, Jacob understood and spoke the Aramaic language Laban spoke.

Aramaic was the language of the Assyrian Empire which conquered the Middle Eastern world, including Israel, around 750 BC. The Assyrians imposed their language on all conquered peoples. Even Jonah the prophet, when on a ship from Joppa to Tarshish, understood the gentile sailors and vice-versa. He preached to the Assyrian people at Nineveh and was understood by them in the ninth century BC. The two succeeding empires—Babylonian and Persian—both employed the Aramaic language as well; and the Greek empire never imposed Greek on the Jews of Palestine. The Jews continued speaking and writing Aramaic as their native tongue—from the ninth century BC, to the Muslim conquests of the eighth century AD in Palestine and throughout the Middle East.

Aramaic Aleph-Bet and Letter as Numbers (same alphabet as Hebrew)

Letter Name	in Aramaic	Keyboard Letter	Pronunciation	Number Value
alap	א	T	<u>ah</u> -lap	1
bet	ב	C	bet	2
gamal	J	D	<u>gah</u> -mal	3
dalet	Т	S	<u>dah</u> -let	4
het	п	V	het	5
waw	٦	U	waw	6
zayn	T	Z	zayn	7
khet	Π	J	khet	8
tet	υ	Y	tet	9
yodh	٦	Н	yod like strode	10
kap	כ	F	kap like hop	20
lamed	ל	K	<u>lah</u> -med	30
mim	מ	N	meem	40
nun)	В	noon	50
semkat	ס	X	<u>sem</u> -kat	60
ayin	ע	G	<u>ah</u> -yeen	70
pe	9	P	peh	80
tzade	3	M	<u>tzah</u> -deh	90
qop	ק	E	kop like rope	100
resh	٦	R	resh	200
shin	W	A	sheen	300

tau	ת	, (comma)	tah-oo	400
kap (final form)	Т	L	kap like hop	20
mim (final form)	ם	O	meem	40
nun (final form)	ι	I	noon	50
pe (final form)	์	; (semi-colon)	peh	80
tzade (final form)	'n	. (period)	tzah-deh	90

NOTE: the above English keyboard letter for the Aramaic letters are for the standard Hebrew keyboard, since Hebrew and Aramaic use the same alphabet. There are Hebrew fonts floating around that are non-standard (mostly on Macs). In pronunciation, with words with two syllables, the underlined portion is emphasized.

Some basic Aramaic grammar lessons will be helpful for code-searching the Peshitta Aramaic NT. *The Aramaic language is written and read from right to left, as are all Semitic languages*. In order to effectively use the English–Aramaic Dictionary, know that most Aramaic words have prefixes and/or suffixes attached to the root word. It is helpful to know the most common ones, in order to identify the root word.

Prefixes are called "Proclitics", and the common ones are:

1 (bet) in, in the, with, at

T (dalet) of, who, which, that

1 (waw) and, also, but

7 (lamed) to, for, infinitive of purpose marker, direct object marker

1 (meem) infinitive marker, participle marker

An example: **earth or land** is ארעא – transliterated as "area." We get the English word "**Area**" probably from Aramaic.

in the earth would be בארעא, with the ב (bet) proclitic preposition attached at the beginning. to the earth would be לארעא, with the ל (lamed) as a proclitic.

of the earth would be דארעא, with the T (dalet) as a proclitic.

and the earth would be ארעא, with the T (waw) as a proclitic.

Remember that the beginning of a word is its rightmost letter, not left. It reads in the opposite direction of English.

To look up the root noun "Man" for instance, find the noun in the dictionary under "a man" or "the man." That should usually give the root word without proclitics or enclitics in at least one of the entries. There may be more than one Aramaic root for a particular English word. The definite article "the" or the indefinite article "a" may both be understood from the root noun form, called the **Emphatic form**. The context will decide; sometimes either one is equally suitable. Also, **most nouns** have the same form in the plural as in the singular, unless vowel points are included in the text. In older Peshitta mss., vowel points are not used, as is true of old Hebrew mss. They are preserved by a "Massora," a tradition passed on by professional scribes called "Massoretes." The Massora are notes copied for each book of scripture which record statistical information about the text—the total number of words, middle word and verse of the book, and perhaps the number of Aleps, Bets, Gamals, etc.

Is it not very interesting that the Peshitta text was so cared for by a school and tradition very similar to the Hebrew Massorah tradition employed by the Jewish scribes of the Tanach (Hebrew Bible)? Try to find such a school and tradition for the Greek NT manuscripts!

Suffixes are called "Enclitics"

Important also to know are the enclitics (suffixes). These are pronoun objects attached to the end of words- (nouns or verbs or prepositions). They are first, second and third person, singular and plural.

Singular nouns	Plural nouns
1st person — I, me, my	1st person — we, us, our
masc. 1 fem. 1	masc. l fem. l
2nd person — you, your	2nd person — you, your
masc. 7 fem. כי	masc. כין fem. כין
3rd person — him, his, her('s)	3rd person — they, them, their
masc. п fem. п	masc. הין fem. הין

To add an enclitic to a noun, one must drop the final Alep of the emphatic form and then add the enclitic. Example: "the land" is ארעה, "my land" would be ארעה, "his land" is ארעה.

Attachment of enclitics to verbs varies somewhat from attachment to nouns, especially for third person plural enclitics, which are not attached, but are separate from the verb. This should be followed in a good Aramaic grammar, such as Thackston's *Introduction to Syriac* or Alan Alda's web site on Assyrian Aramaic, linked from **Peshitta.org**. At the home page, go to "Tools" and then "Grammar."

Verb forms are also arranged like enclitics. Enclitics are in blue. The following is the Perfect tense (past tense) meaning:

Singular verbs	Plural verbs
1st person — I wrote	1st person — we wrote
masc. כתבת	masc. כתבין fem.כתבן
2nd person — you wrote	2nd person — you wrote
masc. כתבתי fem. כתבת	masc. כתבתין fem. כתבתון
3rd person — he/she wrote	3rd person — they wrote
masc. כתבת fem. כתב	masc. כתבי, -ין fem. כתבו, -ון

To find a verb stem in the dictionary, look for an English verb phrase starting with "He...", since the third person singular verb is the standard verb root for Aramaic, as in Hebrew. "He wrote" is "Kathab"), which is the verb stem to which all proclitics and enclitics are to be attached. Most third person singular masculine perfect verbs (lexical standard) are three letters in length.

Nouns and verbs in Aramaic have both feminine and masculine genders as well as singular and plural number. The masculine singular noun is the standard lexicon form for listing nouns in Aramaic dictionaries and lexicons. The third person masculine singular perfect (past tense) verb is the lexical standard for verbs

In a sentence, the subject and verb will agree in number & gender and person. Feminine and masculine verb endings are listed above. Some feminine nouns are: מדינתא - Malkta (Queen), מדינתא - Mditta (City), אנתתא - Attta (Woman), קריתא - Qrita (Village). As you can see, they end in תא (tau-alep). This is the standard feminine noun ending. Masculine nouns normally do not have the tau-alep ending, simply an א - alep ending in the emphatic form.

Independent Pronouns used as subjects are as follows:

Singular pronouns	Plural pronouns
1st person — I , אנא	1st person — we, liπ, liπiπ
2nd person — you	2nd person — you
masc. אנתי fem. אנת	masc. אנתין fem. אנתון
3rd person — he, him, she, her	3rd person — they
masc. הי fem. הי	masc. הנין fem. הנין

The Numbers (as words) are as follows:

Aramaic Numbers as letters and as words				
Number	Letter as Number	Words as Numbers with masculine nouns	Words as Numbers with feminine nouns	
1	ĸ	ΤП	חדא	
2	ב	תרין	תרתין	
3	z	תלתא	תלת	
4	Т	ארבעא	ארבע	
5	п	חמשא	παω	
6	1	א) שתא (א)	שת	
7	T	שבעא	שבע	
8	Π	תמניא	תמנא	
9	υ	תשעא	תשע	
10	٦	עסרא	עסר	
11	יא	חדעסר	חדעסרא	
12	יב	תרעסר	תרתעסרא	
13	יג	תלתעסר	תלתעסרא	
14	יד	ארבעתעסר	ארבעסרא	
15	or טו	חמשתתעסר	חמשעסרא	
16	ין or טז	שתעסר	שתתעסרא	
17	רך	שבעתעסר	שבעעסרא	
18	ר ח	תמנתעסר	תמ נ עסרא	
19	י ט	תשעתעסר	תשעסרא	

Aramaic Numbers as letters and as words			
20	כ	עסרין	
30	ל	תלתין	
40	מ	ארבין	
50	3	חמשין	
60	ס	א) שתין)	
70	ע	שבעין	
80	9	תמנין	
90	3	תשעין	
100	ק	מארא, מאתא, מאא, plural מארא, מאא	
200	٦	מאתין	
300	W	תלתמאא	
400	л	ארבעמאא	
1000		(א) אלפין, אלף (א), plurals אלפא	
10000		וברן, plural ובר, plural	

In compound numbers using words, the higher number comes first (right to left), then the lower numbers joined by a waw conjunction, \(\bar{1} \).

Example: תלתמאא ושבעין וארבעא is 374 (300 and 70 and 4).

Using letters as numbers, it would be read right to left with largest number first.

Example: **JUU** is 363(300 + 60 + 3).

Numbers over 400 use $\mathbf{J} = 500$, $\mathbf{U} = 600$, $\mathbf{J} = 700$, $\mathbf{S} = 800$, $\mathbf{Z} = 900$. 1000 is \mathbf{X} , 1999 is $\mathbf{U}\mathbf{Z}\mathbf{U}$.

I encourage the interested reader to purchase, *Introduction To Syriac*, by W.M. Thackston, from which much of the above material is adapted. It is a great Aramaic Grammar for beginners, and has a very good Aramaic-English dictionary in the back. Amazon has it in paperback for \$23.10 (34% off). It is well worth the price. I have gone through its twenty lessons entirely and constantly consult it for more grammatical and lexical reference.

I also highly recommend Alan Alda's web site, linked from http://Peshitta.org. Paul Younan hosts Peshitta.org; and he translated The Peshitta Interlinear of The Gospels and Acts 1-15. Paul has invaluable information with a personal understanding of the Aramaic language and The Peshitta Bible. He learned them from childhood through his parents from Lebanon and his membership in The Church of the East, which uses The Peshitta exclusively in its services and liturgy. That church claims to have originated circa AD 40 by the Apostle Thomas' visit to Babylon; where he established a church and preached the Gospel. They also believe their Peshitta Aramaic New Testament is the original language and text as written by the apostles themselves.

The Peshitta NT is the only one thus far to yield positive results in the search for codes in the New Testament. A four year search was conducted by a team of researchers in all the available Greek NT manuscripts, to no avail. I have personally performed an experiment in The Peshitta, searching for mosaics (short codes of 84 Divine names) and compared results in The Greek Textus Receptus. The Greek NT yielded normal results (randomness), while the Peshitta did not.

I have also found several long Bible codes of 25 to 63 letters long in The Peshitta, with very clear and coherent statements concerning The Messiah Yeshua. Two of them are toroidal searches, which are searches connecting the end of the NT with the beginning (search text as a circle); they cover the entire NT text at very large skips. The first and longest code is in Matthew as a toroidal search, and contains the Hebrew Name "Yeshua Meshiach" (Jesus The Messiah) in a long message of several sentences and 63 letters, going around Matthew eight times! The code is in the Hebrew language, as is the shortest of these codes. My Divine Names experiment shows scientifically via millions of data that The Peshitta NT was deliberately coded with The Divine titles throughout as a proof of its Divine authorship. Those Names are in Hebrew and Aramaic.

Please see my web site http://aramaicnt.com for all of the above mentioned findings, and for articles and research I have posted on The Peshitta. My completely new Aramaic-English Interlinear New Testament translation can also be purchased from that site. I have completed all four Gospels in Volume I, and all of Paul's Epistles, Acts, plus the General Epistles plus The Revelation in Volume II. As of January 2007, you can now purchase the entire Aramaic-English Interlinear New Testament as a single volume (printed or download); or, Volumes I and II can each be obtained as a printed book or as a download. This Interlinear NT is newly completed in January 2007. Pastor Glenn David Bauscher.

Phillipians 2:9-11 (Peshitta Interlinear excerpt)

(has exalted Him) הנא (greatly) אסגי (God) אלהא (also) אך (this) הנא (because of) 9 מטל (names) הנא (all) שמהין (that excels) דמיתר (The Name) שמהין (Him) שמהין (& He has given) רהב

(will bow) דישוע (that in The Name) ברוך (that in The Name) דישוע (than) כל (than) ברוך (that in The Name) ובשמיא (than) ובארעא (that is in Heaven) ארעא (the earth) ארעא

(will confess) לשן (tongue) לשן (& every) 11 (ל (that Lord Jehovah) משיחא (The Messiah) משיחא (Yeshua) אבריא (that Lord Jehovah) הו (His Father) אבוהי (of God) דאלהא (to the glory) לשובחא

- 9 Wherefore, also, God hath highly exalted him, and given him The Name which is more excellent than all names;
- 10 that in The Name of Jesus every knee will bow, that is in Heaven, and in earth, and lower than the earth;
- 11 and that every tongue will confess that Jesus the Messiah is Lord Jehovah, to the glory of God his Father.

***מריא (MarYah) means "Lord Yah", the short version of the name YHVH from the Tanakh.

click here to go back to the Index page or continue on to the next section

Preparing a Matrix and Matrix Report for the Internet by Roy A. Reinhold

CodeFinder has some very powerful built-in functions to help you save a matrix or matrix report with very little effort. The aim of this section is to give you some hints in preparing the Matrix or Matrix Report for display on the internet, to send as e-mail attachments to someone, and perhaps to save some space on your hard drive.

1. Matrix — CodeFinder makes it very easy to save your matrix as a graphics file. When you are done working on the matrix, select VIEW—Cropped Matrix in the menus and a new window opens cropping the matrix to the size of the boundary box in the Matrix View (that dotted line, colored box in the matrix). In the lower right panel of the CodeFinder main screen, it shows how many rows and columns are in your cropped matrix.

Next, select FILE—Save Matrix and name it "xxxxx.bmp" which saves it as a graphics bitmapped file. Make sure you save it as "BMP Image (Color)" in file type, so that you retain colors. You could create another folder within the CodeFinder folder named graphics, so that your saved graphics files are separate from the Exported Search Results and Exported Search Lists in the Exports folder; it's just good file management.

I am willing to put matrixes up on the Codes in the Bible website by request, and give attribution to the creator. However, the BMP file is too large to send over the web. For example, if you do Lesson 2 in this tutorial, create a matrix, and save it as a .bmp file, it's 1.5 Mb in size. That's huge.

Should you open the BMP file of the matrix in a graphics program and save it as a JPEG, PNG or GIF? If you save it as a JPEG, the letters will look fuzzy due to the dithering and loss of detail. Yes, a JPEG will be much smaller in size than a BMP file, but the loss of detail in JPEG makes it look terrible. JPEGs are good for photographs, not for Bible code matrixes. You need a graphics program in which you can save the BMP file as a GIF or PNG. The 1.5 Mb matrix from Lesson 2, when later saved as a GIF or PNG, is only 26.8 kb in size, and the 26.8 kb PNG/GIF matrix looks just as sharp in detail as the 1.5 Mb BMP file. That's a reduction in size of 1/56, when you transform the matrix from BMP to a GIF or PNG.

PNG is a relatively newer compression format created by Microsoft. It is a free compression format and is displayed properly in all web browsers. PNG graphics are compressed to about the same size as a GIF and there is no loss to dithering like with a JPG graphic. The difference in PNG and GIF is that GIF is 8-bit and limited to 256 colors, while PNG is 24-bit and can display 16-million colors in trucolor or use 8-bit custom palettes plus it has full grayscale. **PNG is usually far superior for Bible code matrixes and matrix reports.** Since the vast majority of people browse the web with newer browsers, PNG graphics are now a good viable option to use (or use GIF).

I personally use Paint Shop Pro from Corel to do the graphics preparation. However, it's a premium program that sells for about \$100. You can get a freeware graphics program that will do the trick. Try the IrfanView freeware program which allows you to save a BMP file as a GIF or PNG graphic, and is an extremely good program. I've tried it and it works great and is FREE. You can get it at http://www.download.com. If you don't have a graphics program, get this free program.

Another free graphics program is **the GIMP**, which is a free clone of the Adobe Photoshop program. Originally made for LINUX, it is now available for Windows and Macintosh. GIMP is somewhat more complex to use than IrfanView. Photoshop plug-ins also generally work in GIMP. Download at the GIMP website, http://www.gimp.org. Irfan View is much simpler to use than the GIMP.

For those who don't know, the compression algorithm for GIF is a patented process owned by Unisys. Therefore, the GIF compression could not be built directly into CodeFinder without getting permission from Unisys and paying them royalties.

2. Matrix Report — The matrix Report function in CodeFinder enables you to create a full report of all terms in your matrix, done by selecting VIEW—Report. It shows each term in the matrix in Hebrew in the marked color of that term in the matrix, in English, the ELS of the term, the text R-value, the matrix R-value, and the beginning and ending of the term by book-chapter-verse information. New in version 1.23 is automatic calculation of matrix odds, shown in the summary lines of the Matrix Report. You can window between the Matrix View and Report by selecting them under the Window menu. The Report can be printed by selecting File—Print Report. You can save the Report in either a tabbed text or RTF formats by selecting FILE—Save Report. The tabbed text format allows you to then open the report in a spreadsheet program or word processing program that accepts tables (like MS Word, MS Works, Wordperfect, etc.). RTF format allows you to open the saved file in any word processing program including Wordpad, to further prepare it for use as a printed matrix report or more importantly, to prepare it for use as a graphic file legend for the web.

Which is better, to save the Report as a tabbed text file or an RTF file? **Personally, the RTF format is easier and better, because everyone has a word processing program** (Wordpad comes as part of Windows 95 to XP). Also, the RTF format **retains the colors of the Hebrew terms in the Report, and also retains the Hebrew font display for the terms**. In preparing the Report for use on the web, I would likely leave as is, or perhaps cut out the ending letter position of the term column. When saved as an RTF file, you can open the Report later in a word processor and cut the unneeded columns, apply a background color, and save it. With it still onscreen, you can hit the "Print Screen" key on your keyboard, then open your graphics program and paste from the clipboard as a BMP file. Then Save As a PNG or GIF.

When you use the tabbed text format to save your Report in CodeFinder, it enables you to later open it as a table in a spreadsheet program or word processing program that accepts tables. However, because it is a text file, it loses the formatting for the Hebrew in the first column, and loses the colors for each term. In the spreadsheet, just select the first column and apply the Elronet mono bold

12pt, or the Netextmo font. You cannot get the colors back except by applying them individually to each Hebrew term. For that reason the RTF format is much better. However, if all black letters are OK, then text is not hard to use either. Add a border around the outside of the cells and a background color, and you have the Report done. Then use the "Print Screen" key to copy it to your clipboard, and paste it into your graphics program to save as a PNG or GIF.

Another method is one that I use because it is faster, but requires a little more knowledge of graphics. When I have a Report in CodeFinder, instead of saving it, I just make the window as large as I can, then use "Print Screen" to copy everything to the clipboard. Then I open my Paint Shop PRO graphics program, paste from the clipboard, and trim off all the excess. Then I add a border, background color, and save as a GIF. With this method, I can prepare a wonderful PNG or GIF of the matrix Report in a couple of minutes without using a word processing program or spreadsheet. You can do the same thing with either free graphics program mentioned above, IrfanView or the GIMP.

There is no one answer for preparing the Matrix Report as a PNG or GIF for the web, since CodeFinder gives you the latitude to use whatever programs you already have, by saving the report as a tabbed text file or RTF file. Try the different methods and see which way you like to do it. What is apparent is that you can prepare a great matrix legend now without typing, without using many PNG or GIFs for each term, but do it all in one step and have a nice, uniform looking matrix legend as one PNG or GIF graphic that is small in size.

click here to go back to the Index page or continue on to the next section

Lesson 1:

HOW TO FIND A MATRIX IN HEBREW

by Roy A. Reinhold

This lesson teaches you to find and develop a relatively simple matrix using the CodeFinder: Millennium Edition program (version 1.23). One of the best ways to use this Lesson is to display it in Acrobat Reader and have CodeFinder: ME running at the same time. Try to resize both program windows, so that they are side-by-side. That way you can go back and forth between the two programs. Or, you can print this lesson in order to go through the numbered steps. It's important for you to actually do each step and not just read the Lesson. By actually performing each step, you will learn how to use CodeFinder: ME—applying both the simple functions and more advanced capabilities. Bible code searches are easy once you learn how to utilize all the functions of the program.

First, launch the CodeFinder program so that you have the main screen displayed. Then click on the yellow folder button in the upper left to select the search text. Select the Torah (torah.cod) and press Open. You'll see it load (very quickly) via the progress bar on the bottom of the main screen. And on the bottom the legend will change from *Idle* to *Ready*, telling you the program is ready to begin a search in the search text



NOTE: CodeFinder has advanced functions called **Matrix Filter** and **Alternate Word Highlight** (Word Highlight) accessible under the **Options** menu. We need to turn both of them off if they are on, because we want to start out using the basics. Select OPTIONS—Matrix Filter in the menus, and make sure it is OFF. For Alternate Word Highlight, look at Word Highlight and make sure it does not have a check mark next to it (if ON, there would be a check mark on the left side in the menu). If it is checked, just select it to toggle it OFF.

Precondition Settings:

- 1. load torah.cod as search text
- 2. OPTIONS—Matrix Filter to OFF
- 3. OPTIONS—Word Highlight to OFF

Lesson 1 develops a simple matrix on the 9-11-2001 attack on the twin towers in New York City. When you finish Lesson 1, the matrix should look like the matrix to the right (without the English labels which I added in a graphics program).

Personally, the way I begin working on a Bible code matrix is to list my possible terms on a pad of paper in English in a column. Since a codes matrix is thematic, we want to develop terms that are related to the desired

של הלאמ באאלי סערד העם ריאשר הב שאתידו ואתרגלוב כלארצמצרימוי מתחתי לובתחל האנחנומו באימל הת יוספע גלות של פיפסעה וית נל המצד ימומאת שנהויקר בנימיישר אללמו האשר גמלנו את וויצוואליו ספלא מ להיא סרה מאל הייצוקו אל הייעק בע ענטוי הובשפטי מגדלי מול קחתיאת מיהנני משליחב כובעבר על היכמוי סרמעלי רקא תירולי הוה אל היכמוי סרמעלי רקא מלת האתואוי אכל בנת נשבושר ירלא כהנאר רבקד שני ראת הלתעשה פלאנט ינחת נמשה את כל אשר עשה אל הימל מש theme of the matrix. Seeing them on paper helps me to focus on listing a good set of terms. Once I have the terms listed in English, then I translate the words into Hebrew, and transliterate the names of people and places. Names have to be transliterated, that is, to spell them with Hebrew letters so that when pronounced it SOUNDS the same as when pronounced in English. With all other words we use bilingual Hebrew-English dictionaries to get the Hebrew equivalent for an English word. Although CodeFinder: ME has a robust bilingual Hebrew-English dictionary built in, a printed bilingual dictionary is helpful to determine nuances of meaning (since many English words have multiple meanings), in order to use the correct Hebrew equivalent word. I recommend the printed, *Ben-Yehuda's Pocket English-Hebrew Hebrew-English Dictionary*. It's very inexpensive and widely available (Amazon has it for \$6.29, and new ones under New/Used are as little as \$3.50). Other printed dictionaries are more expensive, but *Ben-Yehuda's* is more comprehensive and better.

Let's get started! Normally, our list of possible terms on paper would be greater than we may find (we might not find all of them in a matrix). Let's assume that we look for the exact terms in the matrix shown on the previous page. The Hebrew equivalent word translation is shown below for each, except for the name Bin Laden, which is transliterated. Many times there is more than one possible Hebrew spelling for a given transliterated name, and we need to look for all of the possibilities.

1. Bin Laden בינ לאדנ בינ לדנ

There are two possible transliterations for Bin Laden, with the one on the right used in newspapers in Israel. We'll use the one on the right. (also, the word "bin" can be spelled without the yud).

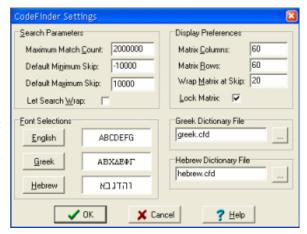
- 2. The twins התאומים
- 3. Towers מגדלימ
- 4. Murders ロメコ
- 5. Terrorist attack ソコスワ

6. USA ארהב

This is the commonly used abbreviation in the Israeli press for USA, which is short for artzot habrit, which means "the covenant lands".

7. Thousands of people אלפי איש

Step 1: Before entering the terms for search, we need to correct the program Settings. Select in the menus, OPTIONS—Settings and the Settings window opens. Set the Rows to 60, the Columns to 60, and Wrap Matrix at Skip to 20. Make sure the Lock Matrix box is checked, and the Let Search Wrap box is unchecked. Set Maximum Match Count to 2000000 (2 million with no commas, unless you don't have very much ram memory in your computer; if you have 128mb or more, then 2 million is no problem). Set the Default Minimum Skip to -10000 (note minus sign), and Default Maximum Skip to 10000. You MUST press the **OK button** for the



settings to be saved. If you exit Settings by using the cancel button or the red x in the upper right, then all the work in typing in these settings is thrown away and not saved.

Step 2: We are now ready to enter the search terms in order to do our codes search. We can do it either using the onscreen keyboard, or using the regular computer keyboard. Personally, I use the regular computer keyboard, since it is faster for me and I have memorized where all the Hebrew letters are located. We included a GIF in the Tutorial folder when you installed the program, and you can print that GIF and tape it on the side of your monitor to aid you in typing in words. I put the Hebrew name of the letter and the regular English Keyboard letters on each key for you.



Notice that under the words below are the English letters to type the terms if you want to use the computer keyboard instead of the onscreen keyboard. We enter the words by clicking in the Search Term: pane, and then typing the letters, then hit Enter to move it down to the Search List.

1. Bin Laden בינ לאדנ בינ לדנ

We'll use the one on the right. type: **chb space ktsb** (version 1.23 now allows you to have a space between words while searching as if it were a continuous string, a great new feature using the regular keyboard or onscreen keyboard).

2. The twins התאומים

type: v,tunhn

3. Towers מגדלימ

type: ndskhn

4. Murders NY17

type: rumj

5. Terrorist attack リコカワ

type: pdug

6. USA ארהב

type: trvc

7. Thousands of people אלפי איש

type: tkph space tha

Once you've entered all 7 terms above, your program should look like the graphic below. Notice that the bottom pane (Search Results) on the left displays all the search terms and has numbers like 0/9



for Bin Laden. The numbers show actual terms found for our ELS search range (0), and the number of statistically expected terms for the search range. Since we have not yet done the search, the number of actual terms found for each term is zero. The number of expected terms is an important concept. If the number were too high for a short 3-letter term (say 2,000,000), then we could reduce the ELS range for that one short term to reduce the total number expected.

How do we reduce the ELS range for one term? Or, how do we correct a spelling mistake? We do both in the same place, in Search Parameters. To select Search Parameters, go to the OPTIONS menu and select Search Parameters. Go there now.

We'll do everything at once while we are there, including typing in the English meanings. The Advanced Search Parameters window opens and displays term 1. Click in the Translation pane and delete the dashes and type in Bin Laden. To go to term 2, go to the Term No. pane and click the small up arrow button to go to term 2. Type in the English translation in the Translation pane, the twins (in Hebrew, "the" is a prepositional letter on a word and not a separate word). Go to term 3 and type in towers. Notice that for each term, the window displays the expected number of term findings for each term. Go to term 4 and type in murders. Go to term 5 and type in terrorist act. Go to term 6



and type in USA. The expected number of terms for USA is 151,025. Let's lower that number. Uncheck the box for Use Default Skip Range and take out one of the zero's for Min and Max skip so that your range for this term is now -1000 to 1000. Notice that when you do this, the expected number of term findings for USA drops to 15,806. Toggle to term 7 and type in thousands of people. If we had misspelled a term when we first typed in the terms, we could click in the Search Term: pane when we have that term displayed in Search Parameters and correct it. Now that we've made all the changes in Advanced Search Parameters, click the OK button to exit. If you exit this window or any other after making changes, and use the default or cancel button or the 'red x' box in the upper right of the window, then you will exit; but any changes you had made will be deleted or ignored.

In the Search Parameters window, if we had a very short term (2 or 3 letters) in our search list, that gave way too high an expected number of finds, we could turn off that one term in the search by checking the box Ignore in Search. The final capability in Search Parameters is the Move to Top of List button, where we can move a term to the top of the search list to be the Main Term. The Main Term (#1 in list) is important because CodeFinder does automatic terms



matching of all terms to the occurrences of the Main Term. Therefore, the choice of the Main Term is a very important concept; and we can try one as Main Term and do a search; and if dissatisfied, move another term to the Top of List to be the Main Term, and then re-do the search. All in all, the settings and capabilities in the Search Parameters window are outstanding; and they are part of what makes CodeFinder more powerful and precise than all other codes programs.

Step 3: We are just about ready to do the actual search. First, there is a setting which affects row-splitting. Go to OPTIONS—Row Splitting, and select Disable. If we had left it on Auto, the program would use all row-split possibilities of the main term from 1 to 11, where 1 is disabled. Let's say our main term was found at an ELS of 1000. Displayed vertically in a matrix with row-split disabled, then the main term would be vertical with one letter on top another (a letter on every row). If we row-split by 2, then the displayed matrix would be at an ELS of 500 while our main term was still at an ELS of 1000. This means the main term display would be vertical on every other row. For higher row-splits to the maximum of 11, it works the same way.

What is the purpose of row-splitting? We've found that there is extremely strong evidence that the Bible code is 3-dimensional. While we don't yet have 3D software, we can flatten the 3D matrix into 2 dimensions by using row-splitting. This brings terms we expect in a matrix—on a specific theme that appear at regular intervals in distance out from the main term—into the proximity of the main term. Row-splitting has enabled Bible code findings to leap ahead even though we don't yet have 3D codes software. What holds us back on 3D software at this time is not the ability to make the software, but the ability of a user to display the results on their computer. Advanced video cards capable of displaying a 3D matrix cost in excess of \$1200, which is more than many people pay for an entire new computer. Until good 3D display capability is built into the average computer, we'll have to put aside 3D codes software for a while until technology catches up. Meanwhile, we can intelligently use row-splitting to flatten the 3D matrix to 2D.

Step 4: We are now ready to do the codes search. Click the Search button and the program will begin the search, and if your computer is fast, it doesn't take very long. On my own computer with a 2ghz processor, the complete search only takes 2-3 seconds. This 3-second search looked for all 7 terms in the Torah in our ELS range; and then the program automatically matched all found terms to each occurrence of the main term. Then the program sorted the occurrences of the main term by number of terms matched to each occurrence of the main term. In a lesser program where you had to do this manually, you could spend many hours to achieve what CodeFinder: ME does for you automatically in a few seconds. The results look like the graphic to the right, as shown in the Search Results pane in the lower left of the main screen.

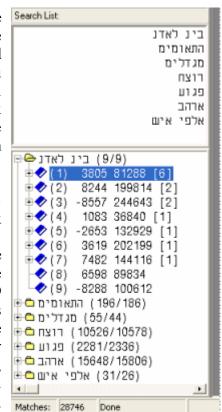
Notice that the first term "Bin Laden" now has 9/9 to the right. This shows that the actual number found was 9 and the expected occurrences in a random text of this size (the Torah, 304,805 letters), with this letter distribution and ELS range, was also 9. In the past, some early codes researchers have tried to make a big deal out of finding more of a term than expected, or less of a term than expected; but they really didn't know what

Search Term: Search List בינ לאדנ התאומים מגדלימ רוצח פג וע ארהב אלפי איש 🗜 🗅 בינ לאדנ (9/9) (196/186) התאומימ 🗅 🗄 (55/44) מגדלים 🗅 🗈 🖈 🗅 רוצח (10526 / 10578) (2281/2336) פגוע 🗅 🗈 (15648/15806) ארהב 🗅 🗅 🖆 🗅 אלפי איש (31/26) Matches: 28746

they were talking about. If you look at the actual numbers found for each term, you'll see that they are generally within 3 standard deviations of the expected (meaning actual and expected are generally close in value). This is generally true for all short terms (one word terms). It's only when we get to a higher level using phrases and sentences (terms over 9 letters in length), that the actual and expected numbers are far different. However, doing longer terms with phrases and sentences is beyond the level of this Tutorial Lesson.

Step 5: At this point, we begin developing the matrix. The first issue is: **how do we display the matrix?** In comparing the graphic to the right versus the one on the previous page, you'll see that I expanded the table of results to show all 9 occurrences of the main term. You do this by clicking on the little plus box to the left of the first term (Bin Laden) and it displays all findings and the little plus box changes to a minus. If you wanted to roll them back up, click on the minus box and it goes back to just displaying the 7 initial search terms.

We display the matrix by clicking once on the top line (1) 3805 to highlight it, and then double-clicking on that line. The matrix appears in the gray area to the right. Before we get to the matrix, what does the information show in regards to each occurrence of the main term? The first line shows, "(1) 3805 81288 [6]". The number (1) is just the sequential number from 1-9 for the 9 occurrences of the main term, Bin Laden. 3805 is the ELS and this is +3805, where reverse ELS's have a minus sign in front. 81288 is the letter number in the Torah where the first letter of Bin Laden is at for the ELS find at +3805. The Torah begins at letter 1 in Genesis 1:1, and ends at letter 304,805 at the end of Deuteronomy. Therefore with a little experience we know that 81288 is in the book of Exodus; since we know that Genesis has 78,064 letters. Finally, we see [6],



which tells us how many terms are matched to this occurrence of the main term from our search list of terms, given the matrix setting of 60 rows and 60 columns. No other codes program does this automatically and sorts the results from best to worst, to show you the best place to look to develop the matrix further. **Important:** You can widen the panes in the left side of the main screen by moving your cursor to where the matrix area starts and the cursor changes to two vertical lines with an arrow pointing right and left. Hold down the left mouse button to drag to the right and make the panes wider. It works the same way between the Search List pane and Search Results pane, to resize those up and down.

Step 6: Information in the matrix. The matrix will open but not fill up the gray area, so how do we do that? In the upper right of the matrix window there are 3 small buttons. Click on the center one to maximize the matrix to the entire gray area. With it larger, you'll see scroll bars on the right and bottom of the matrix. Center both scroll bars to put the main term in the center of the matrix viewing area. **The main term will always be shown in red letters in a black oval shape**.

What if you wanted slightly larger letters displayed for the matrix, than the default size? Select OPTIONS—Font; and then click on Size—14, and click the OK button. Now you can see the letters much better. CodeFinder uses either the Netexmo font or Elronet mono font for display of Hebrew letters, and you can use bold too, giving you many options for matrix display. You'll also notice that when you changed the matrix letter size, it changed the letter size in the Search List pane, and Search Results pane.

OK, we have the matrix displayed and letter size adjusted to our liking, but it's in Hebrew and maybe you don't yet know the Hebrew letters? What is the English equivalent for each marked term in

the matrix? Right click on a marked letter in any of the terms in the matrix, and hold down the right mouse button. A mouse tooltip pane appears as long as you hold down the right mouse button, and it shows the term in Hebrew, in English, the ELS of the term, and the statistical text R-value for the term (explained later). Use the mouse tooltip and you'll see that you can remind yourself at any time what each term is in English. Another way to show all the terms in English, is to select OPTIONS—View as English in the menus. This changes the Search List and Search Results pane to English. A third way is to move your cursor anywhere in the white part of the Search List pane (middle one on the left), and right-click. You'll see that it toggles the Search List and Search Results pane back to Hebrew from English. Do it again and it will go back to English.

What if we want to see what the surface text of a row in the matrix says? Move your cursor on top any letter in the matrix (marked or unmarked) and double-click on the letter. A scripture window opens and tells the the book, chapter and verse which contains that letter; and it shows the entire verse in English (KJV) and in Hebrew. A new feature in version 1.23 makes it even easier if you can read Hebrew. It's called Alternate Word Highlighting (AWH). To activate AWH, select OPTIONS—Word Highlight in the menus. The matrix segment to the right shows Alternate Word highlighting turned on. Every other word is black, then gray, then black, etc. making it easy to read the surface text right in the matrix (for those who can read Hebrew). In this way, an experienced codes researcher can quickly see if the surface text is related to the matrix they are working on. For those who cannot yet read Hebrew, use the Scripture Window method, where you doubleclick on any letter to bring it onscreen. To deselect AWH, just select it again in the Options menu.

יואמכואחיכלהשתחות ימהאלהלאמרבאאליהע מאישאתידוואתרגלוב בבאמתחתינובתחלהאנ להמיוספענלותנלפיפ רבעימומאתשנהויקרב הרעהאשרגמלנואתווי כמאלהיארהמאלהייצ זרוענטויהובשפטימנ זרוענטויהובשפטימנ זרוענטויהובשפטימנ זרוענטויהובשפטימנ זרוענטויהובשפטימנ זרוענטויהובאלהייצ אתעמיהננימשליחבכר והעתירוליהוהאלהיכ טפומלתהאתואזיאכלב יכמכהנאדרבקדשנורא נמדינחתנמשהאתכלאש

In the lower right of the CodeFinder window, below the matrix, you'll see additional information on rows and columns. In our matrix you should see 26 columns and 13 rows. Where does this information come from? If you can see the entire matrix

הרנ מהעשהל כהעמה זהכיה.

Matrix: 26 columns, 13 rows. Area = 338.

onscreen, you'll see that CodeFinder drew a dotted line box around the portion of the displayed matrix, in which are contained all the terms matched to this occurrence of the main term. This matrix as is, is 26 columns wide, by 13 rows in height, and contains 338 letters.

Step 7: Matrix Report. CodeFinder: ME will automatically generate a matrix report; the report shows a lot of information based on the displayed marked terms in the matrix. To display the matrix report, select VIEW—Report, in the menus. The information displayed for each marked term is the term in Hebrew, the term in English, the ELS (Skip, equidistant letter spacing), the statistical text R-value (finding the term anywhere in the Torah for this ELS range), the statistical matrix R-value (finding the term in a matrix of this size in rows and columns), the position of the first letter in the text, and the position of the last letter in the text.

The Matrix Report also shows information lines at the bottom. A new feature in version 1.23 is that it automatically calculates the total matrix R-value and statistical odds of the matrix. In this case, the matrix odds are 1 chance in 1,958,260,392. Those are extremely good odds to begin with, and if you go to the Bible Codes USA website and look at the New 9-11 Matrix article (http://biblecodes.us), you'll

see that I developed this matrix further by developing each term into a phrase or sentence. However, we begin finding and developing each matrix just as we have done in this article.

Step 8: Saving Our Work. CodeFinder has efficient tools for saving our work in progress so that we can begin on another day exactly where we left off, by saving our Search Results, or saving the matrix and matrix report.

Saving our work to use another day. We do this by selecting FILE—Export Search Results in the menus. Go ahead and do it, and name it BinLaden.srf. We could then come back the next day and import it, and pick up exactly where we left off the previous day. To begin on another day, we would just start the CodeFinder program, and then select FILE—Import Search Results, and select the BinLaden.srf file. It loads the text, search list, search findings, etc.

What if we just wanted to save the search list (let's say the search list was large) and we wanted to do that in a small file size with just the search list and no other information? We would do this by selecting FILE—Export Search List. Go ahead and do it, and name it BinLaden.stl. You can see why it is important to put the suffix on the filenames, if we had two of them with the same name and one was the complete Exported Results and the other was just the Search List. Why would we want to save just the search list and not the search results? Let's assume that we did a search in the Torah, and didn't really find a good matrix that we wanted to keep. We could come back in the future, and launch the CodeFinder program; but this time load the entire Tanach (Old Testament) for a codes search. Then we select FILE—Import Search List and we could use that saved search list to look in the larger Tanach search text.

Saving the matrix as a graphic. We have developed a matrix, and we want to save it as a graphic, how do we do that? If we go to select FILE—Save Matrix, we see it is grayed out and cannot be selected. In order to save it as a graphic, we first have to crop off the extraneous portion outside the dotted line box encompassing all the marked terms. We do this by selecting VIEW—Cropped Matrix. Now we can save the matrix as a graphic by selecting FILE—Save Matrix. When you do this, you can "save as type" either as a BMP in color or as a monochrome (black and white). I would think that generally you would always save it as a color matrix. Once you have it saved as a BMP file, you can open the BMP file in any graphics program and modify it and save it as a PNG or GIF (don't use JPEG since the dithering in JPEG will make the letters fuzzy). All browsers display PNG graphics well now and PNG can use up to 16 million colors while GIF is limited to 256 colors. PNG makes a custom pallette which just contains the colors used, so it is close in size to GIF. A BMP of a matrix saved later as a PNG or GIF will give you a file size 1/50th the original BMP size with NO loss of detail.

Saving the matrix report. If we have the matrix report displayed (VIEW—Report), you'll want to save it. If you select FILE—Save Report in the menus, you'll see that you can save it as an RTF file type or as a Text file type. Saving it as an RTF file type preserves the Hebrew and color of the Hebrew letters matching that in the matrix (selecting Text loses that info). I always use RTF myself. However, saving it as a text file allows you to import it into a spreadsheet if you wanted to do that. Imported into a spreadsheet, you can then select the first column and change them all to the Netextmo or Elronet mono font and get the Hebrew letters back. I like saving it as an RTF file that I can open in any word processor, including Wordpad, and modify it to my desires.

If you wanted to make the Matrix Report into a graphic to use on a website, how do you do that? You can open the matrix report in a word processor, modify it, and display the whole report onscreen. Then press the "Print Screen" key on your keyboard which saves it as a BMP graphic to your clipboard.

Then open a graphics program and Paste or use CTRL-V to paste it from the clipboard into the graphics program. Then you can save it as a PNG or GIF file. You could also do this directly from the matrix report display in CodeFinder if you didn't want to modify it in any way in a word processor first. The same process can be used for the matrix, especially if you wanted more rows and columns than is given from the Cropped Matrix window. Just display the matrix in CodeFinder as you want it, and press the Print Screen key on your keyboard. Then go to your graphics program and paste it directly. Then save it as a PNG or GIF file.

Step 9: Adding New Terms To The Matrix. Can you add additional terms once you've gotten this far in developing the matrix? Yes, just use the built-in dictionary, tools, or type in new terms. CodeFinder allows you to have an unlimited number of terms in your search list, limited only by the amount of free ram memory for total finds in your computer. Let's go on and add some additional matrix terms.

Since our matrix is about the September 11, 2001 attacks on the twin towers in NYC, we can look for the date in the matrix. Additionally, we might want to look for the number of people who died there (although an exact number may be difficult because I don't think anyone knows the true exact number). We can also look for airplane/airliner, and Al Qaeda.

With dates, you must remember that the Hebrew calendar day runs from sundown to sundown and not midnight to midnight as in our secular time-keeping. Actually, the end of the day is more precisely 30 minutes after sundown. Therefore, if an event occurred around sundown or in the later evening, we might need to look for 2 days of possibilities. Let's say the 9-11 attacks had happened at sundown, then we would look for both September 11 and September 12. With year terms, we can use the longer term with the letter hey (7) or the shorter version without the leading hey. The longer term with the leading hey for 2001 (year 5761) means the Hebrew calendar year that runs from Rosh Hashanah in the fall (1st of Tishri) to the next fall. The shorter version without the leading hey can mean either calendar year 2001 or the Hebrew year 5761. Lastly, in looking for dates we might see "23 Elul 5761" (September 11, 2001) as one long string, or more likely we'll have to look for day-month and year as two separate terms.

With CodeFinder, we can use the outstanding built-in calendar tool to enter dates without calculating them manually or referencing printed calendars. Click in the Search Term Entry pane at the top left, as if you were going to type in a term. Then TOOLS—Hebrew select Date Converter. Next, select September in the upper left drop-down menu. Then to the right of that, scroll the year to 2001. Finally, click on 11 in the calendar to highlight it. You can read on the right that 9-11 was 23 Elul 5761 in the Hebrew calendar, and just below

Hebrew Date Converter											
Gregorian Date Cormat											
September •			-		2001 💠		Day Month Year				
							C Day of Month Year				
Sun	Mon	n Tue Wed			Fri	Sat	☐ On the Day Month Year				
						1	C On the Day of Month Year				
2	3	4	5	6	7	8					
9	10	- 11	12	13	14	15	✓ Include Millenia in Year				
16	17	18	19	20	21	22	Converted Date				
23	24	25	26	27	28	29	23 Elul 5761				
30											
,	בג אלול התשסא										
Day, Month and Year Day and Month בג אלול התשסא Select Select Select Select											
Month	i.	אלוו	Select	Yea		עשסא	Select ? Help				

that is the entire date in Hebrew letters. To enter search terms we use the bottom section and choose the Select buttons as needed. We'll use two of the four possibilities shown: the Day and Month term (23 Elul), and the Year term (5761). Press the Select button for both of them and the terms are entered in

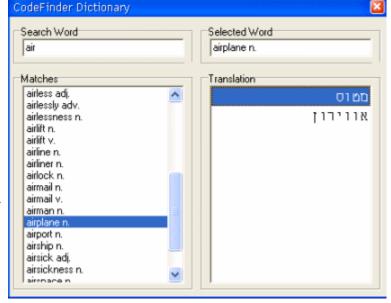
the Search List without typing. Next we'll enter the year term without the leading letter hey. On the right, uncheck the box that says Include Millenia in Year; and notice that on the bottom, the year term now has no leading letter hey as it did moments ago. Press the Select button for Year on the bottom and it's entered for search. We're all done with the Date Converter window, so press the Close button. Back at the Main CodeFinder Screen, scroll down the Search List and you can see that our 3 date-related terms are in the Search List. If you toggle the Search List to English, you can see that the English equivalent for these terms is already there (also true if you use the Dictionary).

Next, we'll enter the number of people who died in the attacks (to show you how to use the Hebrew Number Converter). On one internet encyclopedia, it shows that 2595 people were killed on the ground and 265 on the planes, for a total of 2986 killed. I don't know how accurate that number is, but it's useful for our exercise. Select TOOLS—Hebrew Number Converter in the menus. In the top left, enter 2986, and the Hebrew equivalent in letters



shows up just below. Press the Button for the Converted Number and it is entered in the Search List without typing. Press the Close button to go back to the Main CodeFinder window. Check and see that the new 2986 term is entered in the Search List (and it already has the English equivalent entered in).

Our last addition to the search list is adding the terms for airplane/airliner and Al Qaeda. Let's use the dictionary built into CodeFinder, Click in the Search Term pane in the upper left, and then click on the Dictionary button (a blue book on top, 4th button from the left). Type in airplane in Search Word, and you'll see that airplane n. is in Matches, and it gives you two Hebrew possibilities. Double-click on the top one (matos) and we'll use that; and it's entered for search without typing. If you type in just air, it will give you a long list of words with air in them. This is useful since you might use aircraft n.. airline n., airliner n., etc. So it helps you think of alternative words by seeing many



possibilities. You can scroll down to airliner n., and click on it to highlight it, and the Hebrew equivalent appears in the Translation section. Double-click on m'tos nosi'im to enter as a search term. For the term Al Qaeda, it is not in the dictionary; you'll have to transliterate it or look it up on websites that have both English and Hebrew articles. I often do this for names in the news and use the Debka website (http://www.debka.com) or the HaAretz newspaper website (http://www.haaretz.com) a major newspaper in Israel. You can find a headline or story in English and change the site to Hebrew and get the spelling used in the Israeli press. One caution, a fellow codes researcher born in Israel (Dr. Nathan Jacobi) warned me that just because a name is spelled one way in the Israeli press doesn't mean it is the only valid spelling. We don't rely on some faceless journalist somewhere to define right and wrong. On the Debka website today I saw an article mentioning Al Qaeda and they spelled it:

First, close the dictionary so you are back at the main CodeFinder screen.

Al Qaeda — אל קעידה

use tk space eghsv on your keyboard

another possibility for Al Qaeda is without the yud, אל קעדה

This other possibility is valid because we in the English world don't pronounce the "e" in Qaeda as a long "e", but as a short "e". The Israeli press spelling has the "e" as a long "e" with the yud. You can enter this other spelling of Al Qaeda by using: **tk space egsv**

Before hitting the search button, we need to go to OPTIONS—Search Parameters and check all our new terms. Scroll through the Term No. to 8, which begins the newly added terms. #8 is OK; #9 is OK; and on #10 in the Translation pane, make it "Year 761/2001". On each of these we are also looking at the expected number to make sure it is not too high a number. #11, #12, and #13 are OK; and type in Al Qaeda in the Translation pane for #14 and #15. Then press the OK button to leave Search Parameters. Back at the main screen, go ahead and press the Search button to do the new search with the new terms.

Step 10: Developing The Matrix With New Terms. As you can see, by adding 7 new terms we only gained 1 additional match to our already existing matrix as a result of the new search. You need to redisplay the matrix by double-clicking the line (1) 3805 81288 [7]. In fact, every time you make a change, you need to redisplay the matrix in order to show the changes. The newly added term is for 2001, and it looks interesting, since the diagonal at -3803 is only 2 off from the main term at an ELS of 3805.

The only problem is that it makes our matrix much larger in size. How can we turn off that new term from the matrix, so that we go back to just our original terms? First, click the plus box for the line (1) 3805 81288 [7] to expand it and show all seven matched terms. Then for the 7th term down, click the plus box for that line and you can see that NDWN is at ELS -3803. Move your cursor on top of the little blue book and right-click to turn off the individual term. The little blue book changes to a hand over a piece of paper to show it is turned off. You can left-click on the item to turn it back on, so go ahead and toggle it back on, then back to off again. Now redisplay the matrix by double-clicking on the line (1) 3805 81288 [7]. You'll see now that the matrix is back to the original smaller size.

If you have lots of terms and cannot easily pick them out because of clutter, you can use the 2-item matrix display to help decrease the clutter and easily locate an individual term. Expand the line (1) 3805 81288 [7] and then expand the line for מגדלים (towers) by clicking on the plus box. You can see that it shows the towers term at an ELS of 1 and it starts at letter number 85101 in the text. Double-click on that line 1 85101, and it will redisplay the matrix with only the main term Bin Laden, and the term towers. In this way you can easily see the term in a cluttered matrix and decide to leave it on or turn it off. To redisplay the matrix with all the terms, double-click on the line (1) 3805 81288 [7].

Step 11: Last Learning Points in this Lesson. There is a Print button, where you can print directly from CodeFinder (2nd from left on top). I recommend that you not use that Print button; but print your matrix from a graphics program after saving it. The reason is that you have much more control over the printing that way. You can print Portrait (normal) or Landscape in a graphics program, you can reduce it in size to fit on one sheet in a graphics program, and you can add effects in a graphics program.

Meanwhile, if you print directly from CodeFinder and it requires more than 1 sheet wide, you end up with disappointing results. In a graphics program you can make sure it all fits on one sheet in the best way. The same is true for the matrix report; save it and then open it in a word processing program and modify it as desired and print from the word processor. You'll be happier with the results.

The third button on top from the left is the Onscreen Keyboard. It works well. We also included a keyboard GIF during the installation into the Tutorial folder. If you print the GIF and tape it on your monitor, you can use it as a guide to type in letters in Hebrew using the regular computer keyboard.



The 6th button from the left on top is a Trashcan (delete) button. Do NOT use this button to delete terms from your search list. If you use the Delete button, you will erase the entire search list; and I don't think you'll be very happy with that result. If you want to delete a single term from your search list, then click on that term in the Search List to highlight it, and press the Delete key on your keyboard. Try it with the last term in your search list, the second spelling of Al Qaeda. Highlight it in the Search List and then press the Delete key on your regular keyboard. That term alone disappears from the Search List.

If you want to stop in the middle of a search, you can press the Abort Search button—which is just to the left of the big Search button on top.

The 5th button from the left on top is the Display Skip Viewer button. We'll cover that in Lesson 2 or you can read about it in the HELP. You should know that the HELP is an electronic manual and much time has been invested in HELP in order to assist you. Don't overlook using Help—Contents.

Summary: Lesson 1 has covered the majority of the functions in CodeFinder; and if you've diligently performed each step, then you now have the capability to do codes searches. However, there are some more advanced capabilities which we'll cover in Lesson 2. **Remember, SAVE your work before quitting CodeFinder**. If Export Search Results is grayed out, you need to do a new Search because you deleted or added a term. After the new Search is completed, you can Export Search Results.

Click here to return to Tutorial Index

Lesson 2: ADVANCED FUNCTIONS IN CODEFINDER: MILLENNIUM EDITION

by Roy A. Reinhold

The main purpose of Lesson 2 is to teach you to use some of the more advanced functions in the CodeFinder: Millennium Edition program (version 1.23)—additional program functions to those covered in Lesson 1. One of the best ways to use this Lesson is to display it in Acrobat Reader and have CodeFinder: ME running at the same time. Try to resize both program windows, so that they are side-by-side. That way you can go back and forth between the two programs. Or, you can print this lesson in order to go through the numbered steps. It's important for you to actually do each step and not just read the Lesson. By actually performing each step, you will learn how to use CodeFinder: ME—applying both the simple functions and more advanced capabilities. Bible code searches are not really difficult once you learn how to utilize all the functions of the program.

We are going to use the significant but simple matrix for the Lesson that is featured on the homepage.of.the.codes in the Bible website (my website). I created it recently to show new visitors, that the Bible code has terms that are sentences, very statistically significant matrices, and meaning. We will duplicate the matrix as shown on the right, and then add new terms in developing the matrix. In doing so, we will cover many advanced functions.

Step 1: Begin by launching the CodeFinder: ME program. Click on the yellow folder button and load the search text—torah.cod (the Torah, the 1st 5 books in the Bible). Now go to OPTIONS—Settings in the menus. Set the Rows to 50 and Columns to 50; and set Wrap Matrix at Skip to 10. Have Maximum Match Count at 2000000 (2 million without commas) or more (if you have 512mb of ram memory, you can set it to 8 million). Set Default Minimum Skip to -10000 (-10,000 with no comma), and Default Maximum Skip to 10000. This will ensure that we look for forward and reverse occurrences of all terms. Lastly, make sure the Lock Matrix box is checked, and check the Let Search Wrap box (toroidal search). I and others have developed many significant toroidal matrices in the Torah, and CodeFinder: ME is the only program that allows toroidal/wrapped text searches (where the search text is a circle and not a straight line). The last step is to **press the OK button** so all Settings are stored and retained.

				$\overline{}$						
٦	Ш	Я	J	(•)	П	1	1	א	1	п
ננ	ı	П	1	a	٦	a	ĸ	٦	٦	J
				Ř						
				6						
				(y)						
٦	1	מ	٦	(0)	٦	Л	П	Л	ĸ	Я
٦	a	ı	1	Ŏ	٦	ל	٦	1	מ	П
ı	٦	٦	п	Ø	א	1	a	מ	1	пl
Ι.	_	۰		ĸ	_	Ċ		Ξ	_	
				9						
				ī						
Я	1	מ	П	0	Г	מ	П	Л	Я	1
Я	Л	٦	ı	6	1	Ш	Ū	٦	1	ל
				Ø						
				Ö						٦
Я	1	א	צ	Õ	Ŋ	Л	1	Ш	٦	ל
J	n	Л	א	ĭ	ל	ı	Ľ	1	1	מ

Step 2: Now back at the main program screen, select OPTIONS—Matrix Filter—and set to Off. Next, set OPTIONS—Row Splitting, to Disable. We are now ready to enter the terms.

Step 3: We will enter the two long terms as shown in the matrix above. With version 1.23 of CodeFinder, we can use spaces between words when entering them. The program still looks for the term as one continuous string of letters in the background; but when we use spaces it will also be shown correctly with spaces in the matrix report later. If you enter a phrase or sentence without spaces,

you can always go later to Search Parameters under the Options menu and enter spaces between words. The two terms are:

יה אל צפג אלהימ אמת ו

Yah is God; God encoded truth. (Yah el; tzafan elohim emet.) On your computer keyboard you would type: hv space tk space mpb space tkvhn space tn, (comma key is letter tav).

יה ראה רעש נרמ 2.

Yah considered the commotion of their light. (Yah ra'ah ra'ash neram.) On your computer keyboard you would type: **hv space rtv space rga space brn**

After typing in the term, hit Enter and it is moved from the Search Term entry pane down to the Search List pane. After you've typed in both terms in Hebrew, you can select OPTIONS—Search Parameters and enter the English translation for each term as shown above. **Press OK** then to leave Search Parameters and save the information you just entered.

Step 3: Do a last minute check and make sure on the Main Screen, that the Skip: From is -10000 and To is 10000. If not, then you made a mistake earlier and didn't enter the correct skip range. Change it if needed. We are ready to do the search, so hit the Search button on the main screen. When done, on the bottom left side it should show Matches: 2, and Done. The search may have been so fast that you never saw the blue progress bar on the bottom. In Bible code programs 10 years ago, this same search for two terms would have taken 20 hours, and now with the world's fastest codes program, it takes less than 1 second.

Step 4: The Search results pane, on the lower left side of the CodeFinder main screen, shows the results of the search. If you click on the plus boxes, then you'll see the results as shown in the graphic on the right. The main term (first one in search list) was found at an ELS of 1032 and the first letter of it is at letter number 40,262 in the search

רו) יה אל צפנ אלהים אמת (1/0) יה אל צפנ אלהים אמת (1/0) יה לעטב נרם (1) יה ראה רעש נרם (1/0) יה ראה רעש נרם ברם (1/0)

text (Torah). The [1] indicates one term was matched to the main term, which is our second term found at an ELS of 1031 with its first letter at 45,426 in the search text. Lastly, on the right of the main term is (1/0), which means: "terms found"/"terms expected". We expected to find 0 and found 1 occurrence of the main term. It's not really 0, since the expected occurrence for it was calculated when we first entered the term, to 10 decimal places. Don't worry if you didn't write down the value for expected occurrences for each term when entered, the program remembers them and calculates them as an R-value=log (1/E), where E is expected occurrences, log means base 10.

To display the matrix, doubleclick on the line with "(1) 1032 40262 [1]. The matrix should look as shown on page 1 of the Lesson, except that I changed the Font size. In order to change Font size, you can select OPTION—Font, and change font size or use bold; however, **you must use either Netextmo or Elronet Monospace fonts only**. No other Hebrew font will work correctly, since they are not likely mapped the same. While we are here, you could also select OPTIONS—Background, and apply different colors as a background to specific letters. It's a function I don't personally use at all, but you may find it useful in dressing up a matrix.

Step 5: Up until now, we have just covered the basic functions also covered in Lesson 1. However, it is time to learn more. Many codes researchers believe that often the surface text ties into the theme of

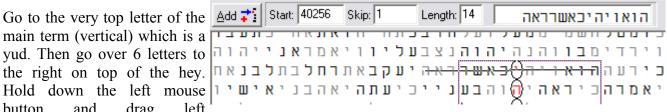
the matrix. The theme of our matrix is "God encoded truth, or, the Bible codes". CodeFinder enables one to check the surface text very quickly to see if it applies to the theme.

The first method is for those who can read and understand Hebrew, and is a new function in version 1.23 called Alternate Word Highlighting (AWH). We can turn it on, and then every other word is in black then gray then black, etc. (see graphic below). Turn it on by selecting OPTIONS—Word Highlight. Then read the horizontal lines right in the matrix. For most beginners, they will not be able to do this, because they lack knowledge of Hebrew. Fortunately, another method makes it easy for the non-Hebrew capable beginner.

The second method is to bring up the Verse Display window for each line, where it shows the verse in Hebrew and in English. Just to the right of the main vertical term in the matrix, just doubleclick on each letter going down, and you can check to see whether the surface text relates at all to the theme of the matrix.

In checking each line from the top of the main term to the bottom using Verse Display, I don't see any of them that directly ties into the matrix theme. But what if one of them did, how do we make it a search term so that it is displayed in our matrix? Do we have to copy it on paper and then type it in manually? We could do it manually, but CodeFinder has a nifty tool to do it much easier. We use the mouse rubberband function. We move the cursor on top of a letter and hold down the left mouse button, and then holding down that left button we drag the mouse to end of the letters comprising the term we want to enter as a search term. Then we let up on the left mouse button. You'll see that right above the matrix the letters are entered in the far right pane, Length, Skip and letter Start number. If we got the letters we wanted, we can then hit the Add button and it will be entered as a search term without typing. Let's do a hypothetical addition from this matrix.

Go to the very top letter of the Add 👬 Start: 40256 main term (vertical) which is a button drag left.



horizontally until you are on top of the hey 7 letters to the left of the main term. Let up on the left mouse button and what you'll have is as shown in the graphic, except it doesn't show the cursor itself. This snapshot was just before I let up on the left mouse button. After you release the left mouse button the horizontal line disappears. We could hit the Add button and the 14 letter string would be added as a search term in our Search List. In this case, there would be no spaces between words, we would have to add the spaces between words and English meaning by going to Search Parameters. However, it did enter the Hebrew term without any typing. This can also be used for vertical, diagonal, or horizontal words/strings of letters we see visually in the matrix. Also, if you wanted to see what the text letter number was for any letter displayed in the matrix (for example top right and lower left), you could move on top of that letter and drag just a little and read the letter number (Start) right above the matrix.

If you entered this 14-letter string as a search term, then let's delete it, since it is a nonsensical example. Do NOT use the trashcan button (ever) because it deletes all terms in your Search List. You must highlight the term you want to delete in the Search List (middle pane on left) by left-clicking on it once. Then hit the Delete key on your computer keyboard (usually just to the right of your Backspace key) and it will delete just that one term. Go ahead and delete it if you had added the term using the Add button above.

Step 6: Adding additional terms. Since we only have two terms in our matrix, let's consider adding more search terms. Our matrix theme is the Bible codes, so additional terms may have to do with the language used for encoding the Bible code. It's obvious that we should look for "Hebrew language" as a search term; however, we should also look for "Aramaic language". There are Aramaic words sprinkled in the Torah and a good part of the books of Daniel and Ezra are in Aramaic. Also, recent research has shown the good possibility of valid Bible codes in the Peshitta Aramaic New Testament. Pastor Dave Bauscher has found some very long code strings in the Peshitta Aramaic NT, and having good Aramaic grammar and spelling (no valid Bible codes were found in the Greek NT in Greek, see the Codes in the Bible website for a more full explanation). So let's look for Hebrew language and Aramaic language as search terms.

ארמית 1

Use the built-in CodeFinder dictionary, by clicking on the button that has a blue book (4th from left on top). In the Search Word pane of the Dictionary window, type in Aramaic. Below it will come up two choices, and click on "Aramaic n.", and you'll see it shows "arami" which is a male Aramaic speaking person (lacks the tav on the end). So click on the other choice in Matches "Aramaic", and on the right it matches what I show above. On the right hand side, double-click on the term and it will be entered as a search term without typing. It also enters the English meaning for it. "aramit" means female Aramaic speaking person, or Aramaic language. Or you can type: **trnh**, on your keyboard to enter the term.

עברית 2.

"Eebrit" is the word for Hebrew language. "Eebri" is the male noun and means a male Hebrew speaking person (Jew). "Eebrit" means female Hebrew speaking person (Jewess), and also means the Hebrew language. Some dictionaries will show Hebrew language as "eebrit lashon, Hebrew tongue/language" or "eebrit safah, Hebrew lip/language". However, "eebrit" by itself means Hebrew language and we don't need to be wordy about it. If you use the CodeFinder Dictionary it will show (eebrit safah) when you look for "Hebrew". You can enter that if you'd like and modify it in Search Parameters. Or, you can just type it in as shown above (type: gcrh, on your keyboard).

Go to Search Parameters after entering the terms (through whatever method) and make sure they are as shown above, correct if needed, and enter the English meaning for each if needed. Then press OK to save and exit Search Parameters. Then hit the Search Button to re-do the whole search with the new terms.

Step 7: After hitting Search, you'll find that the program quickly searched for all 4 terms, and matched them to the occurrences of the main term, probably in about 1 second. Your results should be as shown in the graphic on the right, with two occurrences of Aramaic language found in the matrix and none of Hebrew language. Re-display the matrix by double-clicking on the line "(1) 1032". The Aramit at skip -2061 is excellent, paralleling the other diagonal term, while the Aramit occurrence at skip 7228 is more spread out.

```
יה אל צפנ אלהים אמת (1/0)

□ (1) 1032 40262 [2]

□ יה ראה רעש נרם (1)

1031 45426

□ ארםית (2)

2061 48519

7228 31993

□ 7228 (1/0)

□ 1/0)

□ 4370/4371)

□ 4370/16137)
```

How do we tell which is which in the matrix? You can display them separately with the main term by first doubleclicking on the line "-2061 48519" and then the other line "7228 31993", and looking at them when displayed. Or, you can right-click on a marked letter in the matrix for the two occurrences

of Aramit and hold down the right mouse button. The mouse tooltip yellow window comes up, showing you S: -2061 or S: 7228 depending on which one you chose first. That S: means the ELS skip. How do we turn off the less desired one at ELS skip 7228? Move your cursor on the little blue book to the left of 7228 and right-click. The blue book changes to a hand covering a piece of paper. Then click on the line "(1) 1032" to redisplay the matrix. You'll see that now it only shows the one occurrence of Aramit. What if we wanted to turn it back on? **Right-clicking on the icon turns it off and left-clicking on the icon turns it back on**.

Step 8: It's disappointing that we did not find "eebrit, Hebrew language" in the matrix. However, it may be that we did not find it in the matrix because we have our rows and columns setting too small to see a nearby occurrence of eebrit. Go to OPTIONS—Settings, and change the Rows to 80 and Columns to 80, then **press OK**, and let's see if our hunch is correct. It is, and suddenly we have one match of eebrit and now we have 4 matches of aramit in the matrix. In version 1.23 of CodeFinder, it automatically re-matched all terms to the larger 80x80 size matrix, and redisplayed the matrix with the new results, when we pressed OK while in Settings.

What does 80x80 mean in relation to the matrix? It is calculated from the center of the main term, usually as displayed vertically in the center of the matrix. From the center of the main term, there would be about 40 columns to the right and 40 columns to the left of the main term. There would also be 40 rows above the center of the main term, and 40 rows below it. So if you develop a matrix that is skewed off to one side of the main term, you may need more rows or columns to expand it. It expands symmetrically and not in one direction when you increase the rows or columns.

Analyze all four occurrences of Aramit (Aramaic language) with the idea of turning off all except the best one or two, in order to make the matrix smaller. Or...we could turn to a function in CodeFinder called Matrix Filter, and choose smallest and closest to see which looks best. It will analyze all terms and only keep the best one of each in order to make the matrix smallest, or terms closest. Go to OPTIONS—Matrix Filter and select Closest. You'll see that it changed the matrix so that the only occurrence of aramit displayed is the one at ELS -2061. If nothing changed, then redisplay the matrix using the line (1) 1032, and it will change. To try Smallest, you have to first turn off the Matrix Filter, then hit the Search button, then redisplay the matrix. Then select OPTIONS—Matrix Filter and select Smallest. Again, redisplay the matrix to see the changes. In this case, Closest and Smallest gave the same result. Turn off Matrix Filter now, so that we can show some new functions. The matrix will stay the same after you turn off Matrix Filter.

What if you wanted to analyze all occurrences of aramit manually, since you don't trust what some programmer wanted you to do in Matrix Filter? How can we turn off all but one of the occurrences of aramit. Shift-left-click turns on all except the one the cursor is on; and shift-right-click turns off all occurrences except the one the cursor is on. Open the little plus box for aramit by clicking on the plus box; and you should see 4 occurrences of aramit (-2061 -5146 7228 -9282). Right now, -2061 should have a blue book (turned on) and the other three have a hand covering a piece of paper (turned off). Move your cursor on top the blue book for -2061, hold down the shift button (either side) and right click the mouse button and then let up on the shift key. You'll see that the three that were turned off, are now turned on; and -2061 is now turned off. Shift-right-click turns on all but the one you are on, and shift-left click turns off all but the one you are on. Move the cursor on top the icon for -2061 and shift-left-click, so that -2061 is on and the other three are off. This may seem like a trivial function now with only 4 occurrences, but what happens when you search for a short 3 or 4 letter word in a matrix and there are 300 matched? It can take a long time to turn them all off one by one, except the 1 or 2

occurrences you want to keep. By learning shift-left-click and shift-right-click it will save you much time in a more complex matrix.

Note: You must redisplay the matrix to see the changes if you turn on or turn off terms individually (using left click or right click) or using shift-left-click and shift-right-click. Redisplay it by doubleclicking on the line for the occurrence of the main term "(1) 1032" in our example.

Step 9: We now have 4 terms in the matrix, but aramit (Aramaic language) and eebrit (Hebrew language) are only 5-letter words. Could they each be part of a longer phrase or sentence? How do we find out? This process is called "snooping" where we look at letters before and after a term already found in a matrix, and see if they are part of a phrase or sentence.

There are two methods for accurately finding the letters before and after a term already found in the matrix (actually 3 methods if you count trying to visually get them right from the matrix, although that is often difficult). First, we will use the Skip Viewer. We'll look for the letters before and after "aramit" (Aramaic language), whose ELS skip was at -2061 and first letter at 48519. You can bring the Skip Viewer up onscreen by using the button (5th from left) or select VIEW—Skip Viewer. If we bring up the Skip Viewer using the button or menu, it will start at letter 1 in the search text and display 1000 letters. We would then enter at the top of the Skip Viewer window, Start 48519, Skip -2061, and click the Update button. However, if we first synchronize it to the exact word we are interested in, it will go there automatically. In Search Results, we would open the plus box and show the 4 occurrences of aramit. We doubleclick on the line -2061 48519, which redisplays the matrix to the main term and that one matched term. Then we select Skip Viewer using the button or menu, and it will come onscreen right where we want it.

In the upper right of the Skip Viewer, the first 5 letters are "aramit" read from right to left. I use an 8.5x11" pad of paper and write down the Hebrew letters for aramit in the center of a line. Then I just copy down on paper the letters to the left of aramit (first 11 are, אהבלאשארש). OK, those are the letters after aramit, but how do we get the letters before it? The simplest way is to change the Skip at the top from -2061 to 2061 (delete the minus sign) and hit the Update button. Now the alef from aramit is the first letter in the upper right, and reading to the left are the letters that come before it, except they are reversed. What you should have on paper is:

נווכרימתינמ ארמית אהבלאשארשמה

I use a printed dictionary to snoop (Ben-Yehuda's English-Hebrew Hebrew-English Dictionary) and since I know Biblical Hebrew grammar, it is fairly quick to look up possibilities. I write down the possibilities on my pad of paper in analyzing the snooping of a term. Be advised that even people whose first language is Hebrew do not know all words in their language; so even Hebrew speakers are advised to use a printed dictionary. If you know no Hebrew at this point, you will struggle trying to develop phrases and sentences. The reason is that Hebrew sentence structures are different than English sentence structures. For example, the main English sentence structure is: subject-verb-object. The main two Hebrew sentence structures are: object-verb-subject, or, verb-subject-object. One needs to learn Biblical Hebrew Grammar in order to become advanced in the Bible codes and do phrases and sentences accurately. Fortunately, you can learn this at home as self-study. Visit the Codes in the Bible website for advice on how to do this in the Articles section.

In preparing this Lesson, I did not develop/snoop these terms beforehand, so I am doing it as I am writing the Lesson. Here is a quick extension of the term.

ימתינמ ארמית אהב לא שאר שמה

The meaning is: He will delay them. He loved the Aramaic language. It did not remain there.

The first thing we have to ask is whether it makes sense in regards to the theme of the matrix (Bible codes). After the ancient Babylonian captivity, the Jewish people of Israel returned and spoke mainly Aramaic. However, Aramaic did not remain in the land of Israel, and today Hebrew is again the spoken language. Therefore, historically the term makes sense. The second point is, whether we want to include the entire extension, since it will make the matrix large. We could cut it down somewhat so that the matrix doesn't become too large in size:

ימתינמ ארמית אהב

The meaning is: He will delay them. He loved the Aramaic language.

If we wanted to add this term to the matrix, we would just type it as shown above, and then enter it to the Search List. Then go to Search Parameters and add the English meaning. We would also likely have to increase the rows and columns settings in order for it to be displayed in the matrix.

The other method for finding the letter extension to a displayed term in the matrix is to look in the Search Results and display that term. Let's do this for the occurrence of Eebrit (Hebrew language), which was at an ELS skip of 5159 and the start letter at 55730 (from the matrix or from Search

Results). In Search Results, look down the list until you see the the line: עברית

(4370/4371), and open the plus box for it to display all findings of Eebrit. Then scroll down to 5159 55730, which is number 2287. If you move your cursor on top the scroll bar and hold down the left mouse button you can go down to it in a second or two. Doubleclick on the line (2287) 5159 55730, and the matrix will redisplay showing only that term. Then you can copy down the letters before and after it (5 on each side in the example here):

מירלת עברית במאיי

I find this method much quicker to get the letters to snoop a term, than using the Skip Viewer. However, I have friends who like to use the Skip Viewer method, so it is your choice. I won't develop the above letters in this Lesson, but am only showing you how to obtain the letters before and after a term, so that snooping it is possible.

Note: remember that you should select: FILE—Export Search Results, in order to save your work, so that you can import it on another day and pick up where you left off. Do it now, and save it as Godencoded.srf. Then also save just the simple Search List by selecting FILE—Export Search List, and name it Godencoded.stl

Step 10: What if you wanted to know what the distribution of letters was for the search text we are using? If you select VIEW—Statistics you can see the total number of letters for the Torah (304,805), and how many of each letter are in the text.

Step 11: What if you wanted to look for a matrix only in the book of Deuteronomy, and not the entire Torah? There is no selection for it as a separate search text; however, it is easy to do in CodeFinder. You would start the program and load the Torah as a search text (torah.cod). Deuteronomy is one of the first 5 books of the Bible, in the Torah. Then we select OPTIONS—Search Area, and set the Start and

End positions using the drop down selections, to the beginning and ending of Deuteronomy. It already ends at the end of Deuteronomy, so all we have to do is enter the Start point. Or if we knew the beginning letter number for Deuteronomy, we could enter it for a Start, then press the OK button. CodeFinder will reduce the search text so that it is only comprised of Deuteronomy. You can do a straight text codes search or a wrapped/toroidal search with a reduced search text. If we previously saved the Search List, we could select FILE—Import Search List, and select Godencoded.stl. We now have only Deuteronomy as a search text, and we already have the same search list used previously, without any typing.

Step 12: The last function we need to cover is Row-Splits, which is selectable under the OPTIONS menu. Up to this point we had disabled row-splits, but when doing an initial matrix search you can set it on automatic. CodeFinder will match all terms to the main term using row splits from 1 (no row-split) through 11, and give you the best match from all of them. I prefer to do it manually, because I want to see visually how the matched terms look in relation to the main term. I then select each row-split separately from 2 to 11, and look at them visually. As each row-split selection is made manually, the program re-matches all terms at that row-split. I have just found from experience that what the program chooses may not be the best. However, there is certainly a use for automatic row-splits when doing an initial matrix search.

Row-splits flatten the 3-dimensional matrix to a 2-dimensional plane. We have significant evidence that the Bible code is 3-dimensional (and possibly more); but at this time we do not have 3D codes software. The main reason is that computers today cannot display 3D very well unless you have expensive specialized video cards. In the future, general computers will almost certainly have good 3D capabilities. When we get 3D capability, I expect the Bible code to show much more than now.

Step 13: Adding other terms. This step is informational/optional, although I thought I would show you additional terms I am contemplating for search in this matrix. It may help you in the thinking process on what to look for in the matrix. As mentioned previously, a matrix is thematic, and additional terms are more likely to be found based on the matrix theme. My own method is to write possible terms down in English in a column on a pad of paper. I then look up the Hebrew equivalent for the words and write that down on paper too. In this way, I don't have to remember what I looked for already, since it is written down on paper. I use the dictionary built into CodeFinder, but rely more on a printed dictionary because it helps me with nuances of meaning. Once I have my additional terms done on paper, I enter them manually into CodeFinder and go to Search Parameters and add the English meanings. The following are additional terms I have looked for in the matrix (but not developed yet).

word, word of אות מלת מלה אות אות אות אות אות אות אות אות באב עודים שליינית letter with alef-bet אות באב לכתוב לכתוב לכתוב Torah code קוד תורה language יבינ he will understand יבינ codes (hidden) עפונות פענה את הצפנ

hidden צופנ code צופנ in the language of the Torah בלשונ תורה secret סוד the skip/skipping הדלוג in the secret of language

If you had done Step 11 to make a reduced search text of only Deuteronomy, then select FILE—Import Search Results, and select Godencoded.srf to take you back to the previous matrix. Then you can add any of the above terms for search. Use the above list as a few ideas to develop the matrix. In writing this Tutorial Lesson in January 2007, I have not yet developed the matrix further. When I do, I will put it up on the Codes in the Bible website.

Remember, SAVE your work before quitting CodeFinder. If Export Search Results is grayed out, you need to do a new Search because you deleted a term, or added a term, without doing a Search. After the new Search, you can Export Search Results. For questions about the Tutorial or this lesson, email Roy (Reinhold) at codes04@ad2004.com.

Click here to return to Tutorial Index