

# The Ultimate Apologetics

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## Abstract

This article argues that God purposefully designed the number 37 into His spoken word (the Bible), into His created life (the genetic code) and into the names of His Son (“Jesus” and “Christ”).

The connections are profound. God creates *through* His word, and since the creation has a mathematical structure it shouldn't be surprising to find such structure also in the word. And since the Bible entitles Jesus as both God's word (Joh 1:1) and life (Joh 14:6), it is not farfetched to find similar patterns also in the names of our Lord.

Due to the objective and inerrant nature of mathematics, the structural patterns shown are difficult to deny. However, my conclusion may be challenged: that the patterns not only reveal an intellect far beyond human capacity, but also that it is the very *same* Intelligence behind both the Bible and the creation. By branding Scriptures with the number 37 God authenticates His word, and by imprinting the genetic code with the same number, God verifies He is also the Creator of life.

## Background

This article aims to reveal similar mathematical patterns based on the number 37 both in the Bible (mainly in its first verse) and in the genetic code. This is a strong case for an intelligent designer but the similarities takes us even further than that: It shows that it is the *same* architect behind both the Scriptures and living organisms.

The described patterns in the Scriptures must not be confused with “codes” carrying secret messages or esoteric knowledge addressed to a select few with special insight. The Bible is written to be understood and applied in the Christian life, so why would its author camouflage its teachings and its prophecies behind curtains of enigmatic language? No, the *purpose* of the mathematical structures is totally different from that of adding information to what is expressed in plain text. In my opinion the structures are there to validate the text. They are deliberately incorporated in the Bible by God as His authenticity seal, but they do not extend the knowledge. Therefore, we do not have to search for information between the lines of the Bible, but we may discover evidences of a mind-blowing intellect between the same lines.

Finding mathematical patterns in the Scriptures should not come as a surprise. Creationists correctly use the mathematical regularities of natural law as evidence of a lawgiver. This Legislator creates by speaking into existence (Hebr. 11:3), and since the creation is mathematical so ought God's word be. If – or maybe when - the mathematical structure of the Bible astonishes us, we must not forget that also the mathematical structure of nature is a miracle. The only (?) difference is that we have become accustomed to the latter but not to the former. At least not yet.

The details of the calculations in the article may be found on my webpage.<sup>1</sup>

## 37 in Gen 1:1

Today we use dedicated digits (1, 2, 3...) to express numbers, but this has not always been the case. In ancient Hebrew and Greek, numerical values were instead assigned to the letters of the alphabets. Also words and sentences had such values which were obtained by simply adding the values of the constituent letters (i.e. no positional notation). This means that a text had not only a semantical meaning but also numerical values that may be analyzed with arithmetical methods.

The procedure of assigning values to letters/words/sentences is called *gematria*, even though this word may also denote some mystical connection between the values and the semantical meanings.<sup>2</sup> In Hebrew there exists different ways of allocating values to the letters, but this article employs only the easiest and most commonly used named *mispar hechrachi*<sup>3</sup>, and it is defined in figure 1. The figure also applies this method to the prologue of the Bible, Genesis 1:1. Note that in Hebrew the text is read from right to left.

Alef	א = 1	Tet	ט = 9	Pe	פ ף = 80
Bet	ב = 2	Yod	י = 10	Tsadi	צ ץ = 90
Gimel	ג = 3	Kaf	כ ך = 20	Qof	ק = 100
Dalet	ד = 4	Lamed	ל = 30	Resh	ר = 200
He	ה = 5	Mem	מ ם = 40	Shin	ש = 300
Vav	ו = 6	Nun	נ ן = 50	Tav	ת = 400
Zayin	ז = 7	Samekh	ס = 60		
Het	ח = 8	Ayin	ע = 70		

the earth	←	and	←	the heaven	←	*	←	God	←	created	←	In the beginning
הָאָרֶץ		וְ		הַשָּׁמַיִם		אֶת		אֱלֹהִים		בָּרָא		בְּרֵאשִׁית
90+200+1+5 =296		400+1+6 =407		40+10+40+300+5 =395		400+1 =401		40+10+5+30+1 =86		1+200+2 =203		400+10+300+1+200+2 =913

Figure 1. The gematria method mispar hechrachi - assigning a numerical value to each Hebrew letter - applied to Genesis 1:1. The middle word (marked with an asterisk) is a grammatical construction that cannot be translated. Where two letters are given in the table, the second is used at the end of words.

The Hebrews began using gematria after the Old Testament was written, which means that the key to decipher a possible code was discovered *after* the code was generated. In my opinion this excludes human interventions in creating both the code and the key. When God inspired the writers of the Scriptures, He led them to include mathematical patterns but had other men discover them at a later time. It is a form of progressive revelation, but not by adding to the Scriptures but to uncover what is already there.

Before we move on to finding the number 37 in Genesis 1:1, we will stop by a circumstance much more acknowledged to scholars, namely that the verse also is saturated with the number 7:

- Genesis 1:1 has 7 words.
- The verse has 28 (4x7) letters.
- The 3 first words (from right to left) have 14 (2x7) letters, and the 4 last words have 14 (2x7) letters.
- The 3 main words (God, the heaven, the earth) have 14 (2x7) letters together, and the rest have 14 (2x7) letters.
- The middle word with its left neighbor has 7 letters, and so does the middle word with its right neighbor.
- The 3 main words (God, the heaven, the earth) have a numeric value of 777 (111x7).
- The sum of the numeric values of the first and the last letters in each word (14 letters) is 1393 (199x7).
- The sum of the numeric values of the first, the two middle and the last letters (4 letters) is 133 (19x7).

In the three last points, the numeric values of some characteristic words and letters have been shown to be divisible by 7. However, the numeric value of the entire verse is not, which at first glance may seem to overturn the scheme. Why – if God is such great mathematician – does He weave the number 7 into so many *parts* of the verse but not into the *entire* verse? The reason may reveal an even deeper truth: The numeric value of the entire verse is 2701 which is divisible by 37, another number profoundly entangled into the verse. And since 37 is a prime number not divisible by 7, the code systems based on 7 and 37 are independent of one another.

We may now proceed to finding the number 37 interlaced in the first verse of the Bible. We can do this by discovering words or groups of words with number values evenly divisible by 37, e.g. the 3 main words (“God” + “the heaven” + “the earth” = 777 = 21x37), the 5 first words (“In the beginning” + “created” + “God” + “\*” + “the heaven” = 1998 = 54x37), or the last two words separately (“and” = 407 = 11x37 and “the earth” = 296 = 8x37).

But of course, such an exercise runs the risk of observational bias so more scientific rigor is required. Therefore, let us form *all possible* combinations of words from Genesis 1:1 and examine how many of these have number values divisible by 37. The result reveals that 37 appears *far* more often than it should from pure statistical reasons.

Figure 2 illustrates how the 7 words of Genesis 1:1 may be combined into 127 different *word-groups* with 1 to 7 words in each: 7 groups with 1 word, 21 groups with 2 words and so on. (The trivial group of 0 words is excluded.)

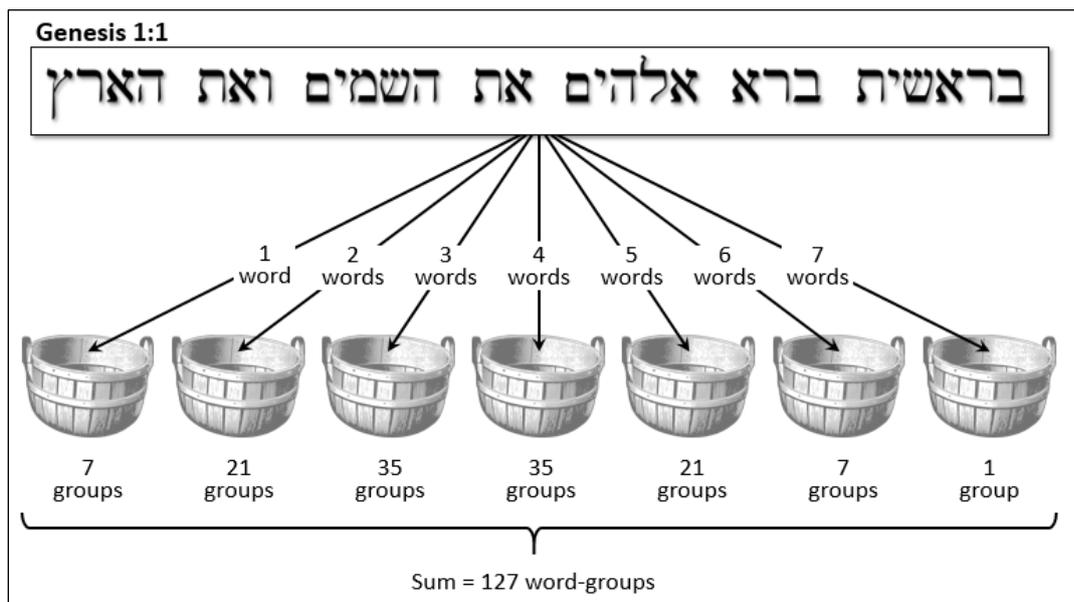


Figure 2. The 7 words of Genesis 1:1 may be combined into 127 different word-groups with 1 to 7 words in each.

From statistical reasons we should expect every 37:th word-group to have a numerical value divisible by 37, i.e. 3 or 4 of the 127 groups ought to have this property by coincident. In reality, 23 of the groups are divisible by 37. The likelihood for this to happen by chance is calculated in a separate paper<sup>4</sup> where it is shown to have a p-value  $\leq 5,86 \times 10^{-5}$ . Figure 3 illustrates the uniqueness of 37 in another way. On the vertical axis is the number of word-groups in Genesis 1:1 evenly divisible with the factor on the horizontal axis. The dashed graph shows the expected result. For example, every 5:th word-group ought to be divisible by 5 by chance, and therefore 25,4 groups of the 127 should fulfill this criteria. The bars show the actual outcome. They approximately follow the expected results, with one evident exception. The 23 word-groups divisible by 37 show up in splendid isolation.

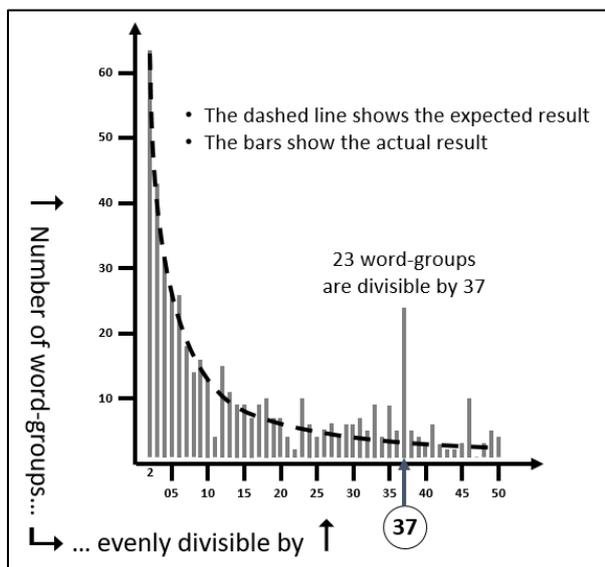


Figure 3. Number of word-groups in Genesis 1:1 evenly divisible by different factors. Note the peculiarity of 37.

I would like to give recognition to Vernon Jenkins from whose website most of the information concerning 37 in Genesis 1:1 is derived.<sup>5</sup>

### 37 in the genetic code

The last decades of molecular biology research has discovered such unbelievably complex structure in the genetic code that it has become almost impossible to deny a supernatural origin on purely intellectual grounds.

However, the most recent findings have further extended the area of good news to Bible-believing creationists. Vladimir Shcherbak (PhD) and Maxim Makukov (MS) have – evidently without any biblical ambitions – discovered arithmetic regularities based on the number 37 in the genetic code. In the paper *The ‘Wow! signal’ of the terrestrial genetic code*<sup>6</sup> they draw the conclusion: “*Accurate and systematic, these underlying patterns appear as a product of precision logic and nontrivial computing rather than of stochastic processes (the null hypothesis that they are due to chance coupled with presumable evolutionary pathways is rejected with P-value < 10<sup>-13</sup>).*”

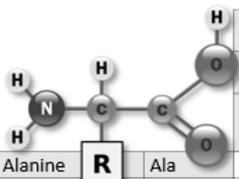
Shcherbak and Makukov assert that the proposal that terrestrial life is intentionally seeded cannot be ruled out. I fully agree, but want to extend their conclusion to identify the One who was doing the “seeding”. Since also the genetic code is hallmarked with the number 37, its originator has introduced Himself as the God of the Bible.

To answer the question how 37 is engraved into the genetic code, we must first look into some basics of molecular biology. The DNA-molecule stores its information as nitrogen bases which are transcribed into mRNA-molecules. When the genetic machinery translates this information into a sequence of amino acids that are about to become a protein, it reads the bases three and three. The bases may therefore be regarded as letters in a genetic language and the three-letter groups as words (called *codons*). Since there are 4 different letters/bases (denoted T, C, A and G), there are 64 (4x4x4) possible triplets which code for the 20 amino acids in the library of life (called standard amino acids). This means that different codons may code for the same amino acid or alternatively, the genetic language has synonyms. Three of the codons do not code for any amino acid at all, but constitutes stop-codes to the translation machinery.

The standard *DNA codon table* defines which triplet of bases codes for which standard amino acid. This translation scheme is universal for the whole biosphere which means that all life speaks the same language. The codon table in figures 5 and 6 has the first letter in each codon on the four main rows, the second letter in the four columns and the third letter within each square. (In RNA, T is replaced by U but that is irrelevant to our discussion here.)

The number 37 may be extracted from the code by adding the number of *nucleons* (protons and neutrons in the atomic nuclei) in different amino acid molecules based on *where* these molecules appear in the codon table and *how many times* they appear. In this way nucleon numbers become arithmetical units inside the genetic code, and if these can be shown to be divisible by 37 significantly more often than expected from statistical reasons, a purposeful signal in the code may be inferred.

The first regularities emerge when all 20 standard amino acids are studied together with their frequency in the codon table, see figure 4. The graphic in the upper left corner illustrates a general amino acid consisting of a standard block, H<sub>2</sub>NCHCOOH (the same in all amino acids), and a side-chain R (unique to each amino acid). The number of nucleons in a standard block is 74 (= 2x37) which gives the first appearance of 37. (It should be noted that proline has a special chemical bound which causes one of the hydrogen atoms (one nucleon) in the standard block to chemically belong to the side-chain. However, here it is considered as part of the standard block to make the structure uniform with the other amino acids. Shcherbak and Makukov call this *the activation key* of the code since there is no natural reason for such nucleon transfer. Instead it appears artificial which is exactly what seems to be its purpose. Since the discovered patterns in this way become virtual and not physical, they are protected from any natural explanation.)



			Number per amino acid					Number of appearances in codon table	Number of nucleons times number of appearances		Molecular weight (u)		
			Atoms						Nucleons			In molecule	In side-chain
			C	H	N	O	S		In molecule	In side-chain			
Alanine	Ala	R	3	7	1	2	0	89	15	4	356	60	89,094
Arginine	Arg		6	14	4	2	0	174	100	6	1044	600	174,203
Asparagine	Asn		4	8	2	3	0	132	58	2	264	116	132,119
Aspartic acid	Asp		4	7	1	4	0	133	59	2	266	118	133,104
Cysteine	Cys		3	7	1	2	1	121	47	2	242	94	121,154
Glutamic acid	Glu		5	9	1	4	0	147	73	2	294	146	147,131
Glutamine	Gln		5	10	2	3	0	146	72	2	292	144	146,146
Glycine	Gly		2	5	1	2	0	75	1	4	300	4	75,067
Histidine	His		6	9	3	2	0	155	81	2	310	162	155,156
Isoleucine	Ile		6	13	1	2	0	131	57	3	393	171	131,175
Leucine	Leu		6	13	1	2	0	131	57	6	786	342	131,175
Lysine	Lys		6	14	2	2	0	146	72	2	292	144	146,189
Methionine	Met		5	11	1	2	1	149	75	1	149	75	149,208
Phenylalanine	Phe		9	11	1	2	0	165	91	2	330	182	165,192
Proline	Pro		5	9	1	2	0	115	41	4	460	164	115,132
Serine	Ser		3	7	1	3	0	105	31	6	630	186	105,093
Threonine	Thr		4	9	1	3	0	119	45	4	476	180	119,119
Tryptophan	Trp		11	12	2	2	0	204	130	1	204	130	204,228
Tyrosine	Tyr		9	11	1	3	0	181	107	2	362	214	181,191
Valine	Val		5	11	1	2	0	117	43	4	468	172	117,148
<b>Sums:</b>								2735 (not 37-factor)	1255 (not 37-factor)	61 (+ 3 stop)	7918 = 214 x 37	3404 = 92 x 37	2738,024 = 2,0 x 37 x 37

Figure 4. Numerical values for life's 20 amino acids. The most common isotope of carbon (C) has 12 nucleons, hydrogen (H) one, nitrogen (N) 14, oxygen (O) 16, and sulfur (S) has 32 nucleons.

Figure 4 lists the number of C-, H-, N-, O- and S-atoms in life's 20 amino acids, and gives the nucleon counts both for the full amino acid molecules and for their side-chains R. (The difference is 74 for all amino acids, which is the nucleon count for the standard block.) Neither full molecules (sum = 2735) nor side-chains (sum = 1255) show divisibility by 37. However, by multiplying the nucleon counts by the number of times the amino acids appear in the codon table, the side-chain sum becomes divisible by 37 (3404 = 92x37). Also the nucleon sum for the full molecules is divisible by 37 (7918 = 214x37), but this is redundant information since we have already concluded that each standard block is divisible by 37.

So the nucleon sum of the standard amino acids (counted once each) is not divisible by 37. However, it seems like the Creator has imprinted His special signature into a variant of this figure. A particular chemical element comes as different isotopes which differ in neutron number and therefore in nucleon number. Until now the nucleon counts have been given as integers, and these apply to the most common isotopes in nature which are also radioactively stable (1H, 12C, 14N, 16O and 32S). In contrast, the rightmost column in figure 4 specifies the molecular weights of the ordinary mix of isotopes present in nature. The weights are given in the atomic mass unit, u, where 1 u is equal to the weight of one nucleon, or to be exact, 1/12 of the weight of a carbon isotope with 6 protons and 6 neutrons. The deviations from the integer nucleon counts are small, indicating that the most common isotopes in nature often are distinctly dominant. Remarkably, the sum of the molecular weights of all standard amino acids is divisible by 37, not only once but twice. The precision is amazing. With molecular weights from Wikipedia (as in the figure), an accuracy of one decimal is achieved. Since the natural abundance of isotopes varies in both space and time, an enhanced accuracy would probably be meaningless.

But the genetic language carries the number 37 in even more and intricate ways. Below is shown a number of ways to split the codon table into parts which result in nucleon counts divisible by 37 for the different parts. It is crucial that these splittings are done through various *pre-defined criteria*, since a freedom to divide the table in arbitrary ways would greatly increase the opportunity to find a searched-for pattern.

The nucleon counts below are made for the side-chains of the amino acids. However, since a standard block has 74 nucleons (which is divisible by 37), analogous results are obtained if the full amino acid molecules are considered in the calculations. (As in reality, STOP-codons are set to contain 0 nucleons.)

In pattern 1 (P1) in figure 5, the codons are grouped depending on whether they contain duplicate bases (grey) or not (white). The first group contains 36 codons with a nucleon sum of 1998 (54x37) and the second group 28 codons with a sum of 1406 (38x37), i.e. both are divisible by 37. Both these groups may be further divided into two subgroups each which is done in P2-P4 in the figure, giving new results divisible by 37. In P2, codons with two identical bases (grey in P1) are subdivided depending on whether these bases are T or C (called

pyrimidines) or A or G (called purines). In P3, the same codons (i.e. the greys of P1) are subdivided depending on whether the remaining unique base is a pyrimidine or purine. In P4, codons without duplets (white in P1) are subdivided based on several rules, the details given in a YouTube video.<sup>7</sup>

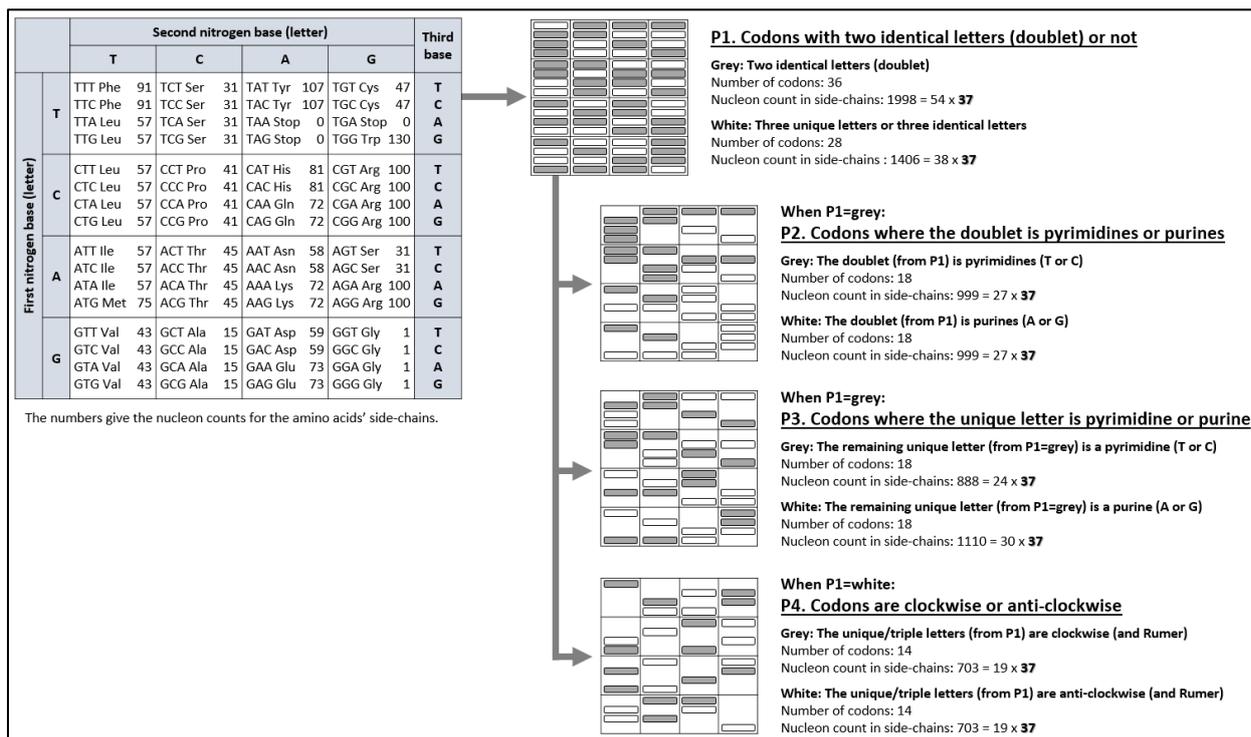


Figure 5. The standard DNA codon table (left) with four ways of splitting it (right) that give nucleon counts divisible by 37. In the first pattern (P1), the complete codon table is divided into two parts, while P2, P3 and P4 are subdivisions of P1. (“And Rumer” in P4 indicates that also Rumer’s transformation is necessary for an unambiguous sorting into the two halves, see video referenced in the main text.) The nucleon counts for the amino acids’ side-chains are given in the codon table giving the reader an opportunity to control the calculations.

The results so far have been based on the full-size genetic code. Shcherbak and Makukov have also discovered arithmetical patterns based on the number 37 in what they call *the contracted code*. This means that its *redundancy* have been eliminated, or that amino acids with synonymous codons are only counted once. Redundancy is defined per square in the codon table (called codon family), meaning for example that Leu is counted both in family TTx (with redundancy 2) and in CTx (with redundancy 4).

Figure 6 illustrates two bisections of the contracted codon table resulting in nucleon counts divisible by 37.

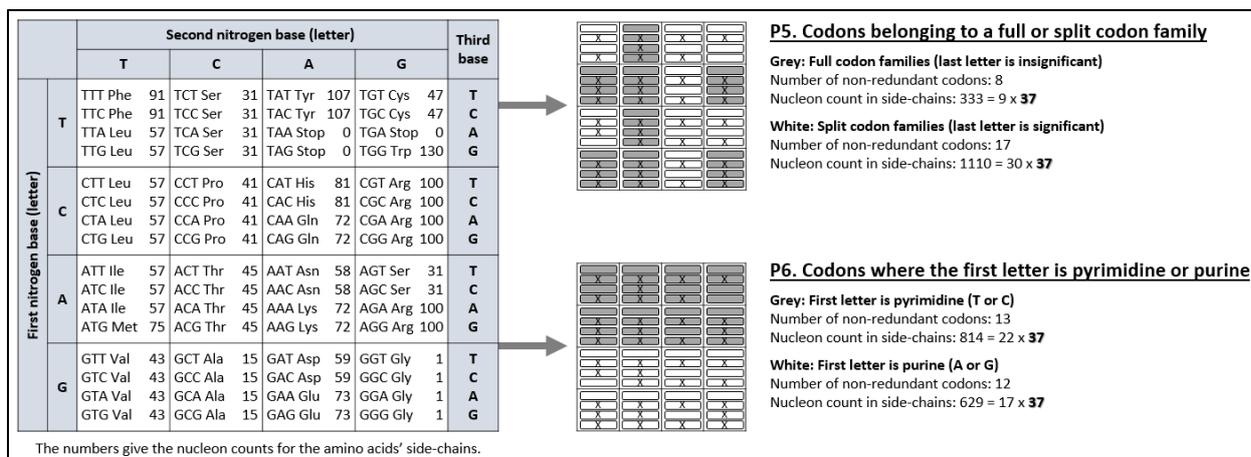


Figure 6. Two bisections of the codon table (repeated for convenience) resulting in nucleon counts divisible by 37. The x:s signify codons that are part of the group but redundant and therefore disregarded in the calculations.

Shcherbak and Makukov also present other non-random patterns in the genetic code, some of which include the number 37. They furthermore elaborate the subject in a more recent paper<sup>8</sup> which is accompanied with two YouTube-videos<sup>9</sup> explaining the patterns in detail.

## 37 in Jesus Christ

In the Bible the Lord Jesus Christ is named both *Word* and *Life*. The apostle John calls Him “*the Word*” in Joh 1:1, and Jesus identifies Himself as “*the way, the truth, and the life*” in Joh 14:6. In 1 Joh 1:1, the two are even combined in one expression “*the Word of life*.” So maybe Jesus is connected to the number 37 in a similar way as the Bible (God’s Word) and the genetic code (God’s life)? Indeed, He is!

Alfa	Α α = 1	Jota	Ι ι = 10	Rho	Ρ ρ = 100
Beta	Β β = 2	Kappa	Κ κ = 20	Sigma	Σ σζ = 200
Gamma	Γ γ = 3	Lambda	Λ λ = 30	Tau	Τ τ = 300
Delta	Δ δ = 4	My	Μ μ = 40	Ypsilon	Υ υ = 400
Epsilon	Ε ε = 5	Ny	Ν ν = 50	Fi	Φ φ = 500
Stigma*	ς = 6	Xi	Ξ ξ = 60	Chi	Χ χ = 600
Zeta	Ζ ζ = 7	Omikron	Ο ο = 70	Psi	Ψ ψ = 700
Eta	Η η = 8	Pi	Π π = 80	Omega	Ω ω = 800
Theta	Θ θ = 9	Koppa*	Ϟ ϟ = 90	Sampsi*	Ϡ ϡ = 900

**Jesus**  
**Ιησους**  
 10+8+200+70+400+200  
 =888 (24 x 37)

**Christ**  
**Χριστος**  
 600+100+10+200+300+70+200  
 =1480 (40 x 37)

Figure 7. The Greek way of assigning numbers to letters applied to the two names of the Lord from Matt 1:1. Both “Jesus” and “Christ” are divisible by 37. (Sigma has two lowercase letters where the second is used at the end of words. Letters marked with an asterisk are extinct.)

The Greek alphabet had its own gematria, and the values applied to each letter are displayed in figure 7. (Note that the principle is the same as for the Hebrew *mispar hechrachi*, the only difference being that the Greek alphabet has more letters.) The numeric values of “Jesus” and “Christ” are 888 (24x37) and 1480 (40x37) respectively, both divisible by 37. This links the written Word (the Bible) with the living Word (Jesus Christ), but it also connects the New Testament to the Old. By inscribing the same number into both parts, God confirms He is the author of the entire Bible.

## Superimposed codes

Besides being saturated with 37, Genesis 1:1 and the genetic code have another common feature. The messages they carry are superimposed, meaning a specific letter may simultaneously be part of multiple codes. Molecular biologists have discovered that a certain sequence of DNA may be used in different ways for different needs by starting the decoding from different places along the molecular string or by reading it from different directions.<sup>10</sup> Correspondingly, we have seen that the letters in Genesis 1:1 have at least 4 purposes: they carry a semantic meaning, they have letter- and word *counts* involving the number 7, they have letter- and word *values* divisible by 7, and they are part of an independent structure where the word values are divisible by 37. Such intervened codes is another solid indication of an intelligent origin because one cannot get a code right by changing one character at a time since such procedure would simultaneously ruin the other codes. Therefore, intervened codes are correctly used by creationists to verify the supernatural origin of life, and I think it is now time to do the same for the Bible, at least for its opening verse.

## Conclusion

My conclusion from the facts of this article is fourfold:

- Both the Bible and the genetic code have a fabulously intelligent origin, evident through for example the entanglement of codes.
- The Originator has not been silent but has revealed Himself through a mathematical signature.
- This signature is the same in the Bible and in the genetic code, verifying they have the same Originator.
- God confirms these conclusions by engraving the very same signature also into the names of our Lord who is both the Word and the Life.

But why does God have a preference for just the number 37? We cannot know for sure but my guess would be that this number may be read as “three sevens” which is 777, a number sometimes used to symbolize God Himself. The hallmarks of our Creator have great finesse!

I cannot but throw myself in fearful awe and admiration before the Mastermind behind such structures. Due to the superimposition of the codes, maybe not even an outstanding intellect is sufficient to get them right in all dimensions simultaneously? Maybe it takes *the Creator of mathematics*, a totally mind-blowing thought.

In my opinion, arithmetical patterns like these makes it impossible to continue denying the Creator on intellectual grounds. Therefore, they constitute *The Ultimate Apologetics*.

## Endnotes

All internet references in the notes were available at Aug 29, 2017.

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<sup>1</sup> <http://masterdirigentsverk.se/forklaringar.html>. Click on "Calculations for the article The Ultimate Apologetics".

<sup>2</sup> <https://en.wikipedia.org/wiki/Gematria>.

<sup>3</sup> <http://www.inner.org/gematria/fourways.php>.

<sup>4</sup> Ola Hössjer: *On the Statistical Distribution of the Number of Word Groups whose Numerical Values are Divisible by Prime Numbers*, January 10, 2018.

<sup>5</sup> <http://www.whatabeginning.com/>.

<sup>6</sup> ResearchGate, *The "Wow! signal" of the terrestrial genetic code* (www), [http://www.researchgate.net/profile/Vladimir\\_Shcherbak/publications](http://www.researchgate.net/profile/Vladimir_Shcherbak/publications).

<sup>7</sup> At time 8:00 in video <https://www.youtube.com/watch?v=3bxZZITfSsY>.

<sup>8</sup> Cornell University Library, *SETI in vivo: testing the we-are-them hypothesis* (www), <https://arxiv.org/abs/1707.03382>.

<sup>9</sup> Video 1: <https://www.youtube.com/watch?v=VxnyjxtLfsA>.

Video 2: <https://www.youtube.com/watch?v=3bxZZITfSsY>.

<sup>10</sup> J. C. Sanford: *Genetic Entropy & The Mystery of the Genome*, 2005, p. 132-133.