Demystifying the number of the beast in the book of revelation: examples of ancient cryptology and the interpretation of the “666” conundrum

M G. Michael

University of Wollongong, mgm@uow.edu.au
Demystifying the number of the beast in the book of revelation: examples of ancient cryptology and the interpretation of the “666” conundrum

Abstract
As the year 2000 came and went, with the suitably forecasted fuse-box of utopian and apocalyptic responses, the question of “666” (Rev 13:18) was once more brought to our attention in different ways. Biblical scholars, for instance, focused again on the interpretation of the notorious conundrum and on the Traditionsgeschichte of Antichrist. For some of those commentators it was a reply to the outpouring of sensationalist publications fuelled by the millennial mania. This paper aims to shed some light on the background, the sources, and the interpretation of the “number of the beast”. It explores the ancient techniques for understanding the conundrum including: gematria, arithmetic, symbolic, and riddle-based solutions. Is the “number” in any way related to advanced automatic identification technologies such as microchip implants? And what of the social implications of integrating such advanced technologies to citizenry who may not wish to buy-in into such schemes (e.g. national healthcare) which are in apparent conflict with their religious beliefs?

Disciplines
Physical Sciences and Mathematics

Publication Details
Demystifying the Number of the Beast in the Book of Revelation: Examples of Ancient Cryptology and the Interpretation of the “666” Conundrum

M.G. Michael
Honorary Senior Fellow, School of Information Systems and Technology, Faculty of Informatics
mgm@uow.edu.au

Abstract

As the year 2000 came and went, with the suitably forecasted fuse-box of utopian and apocalyptic responses, the question of “666” (Rev 13:18) was once more brought to our attention in different ways. Biblical scholars, for instance, focused again on the interpretation of the notorious conundrum and on the Traditionsgeschichte of Antichrist. For some of those commentators it was a reply to the outpouring of sensationalist publications fuelled by the millennial mania. This paper aims to shed some light on the background, the sources, and the interpretation of the “number of the beast”. It explores the ancient techniques for understanding the conundrum including: gematria, arithmetic, symbolic, and riddle-based solutions. Is the “number” in any way related to advanced automatic identification technologies such as microchip implants? And what of the social implications of integrating such advanced technologies to citizenry who may not wish to buy-in into such schemes (e.g. national healthcare) which are in apparent conflict with their religious beliefs?

1. Introduction

The “666” conundrum has been studied by writers for literally hundreds of years. More recently, researchers from a variety of disciplines have become preoccupied with the meaning behind the conundrum. Yet little sober analysis has gone into comprehending the background and interpretation of this number by those investigators who are outside the realm of biblical studies. Scientists for instance, in the fields of engineering or information and communication technology (ICT), will often approach the number as humbug, citing it here and there as a footnote or as an interesting aside of why some people do not wish for control measures in the form of automatic identification to be instituted by government. They have done little if any research into the background history of the “number of the beast” or its interpretation within the biblical context. This paper aims to provide an insight into “666”, depicted as χξς (chi xi stigma) in the earliest papyrus fragment of the Book of Revelation (P47).

While it may be a contentious issue stimulating much debate, few could dispute, that technologies such as automatic identification (auto-ID), location based services (LBS), and condition monitoring techniques are being diffused rapidly for a great breadth of application areas. Indeed, according to most forecasts, care and convenience based ICT wearable and implantable applications are set to skyrocket, especially in the medical domain. With these emerging applications, whether we see the benefits or costs, an added element of outside institutionalized control is being incrementally introduced. Many have noted a growing surveillance society [1], others have spoken of dataveillance [2]. Yet the period being entered into here is more than mass surveillance- it is surveillance which will be instituted through embedded beneath the skin technologies [3]. But rather than venturing to attempt to connect the “666” conundrum with the impending prospects of a total information society [4, p.148] or uberveillance [5], this paper firmly stays within the discipline of Biblical Studies. Its place in an IEEE symposium has more to do with informing scientific scholars, who cite Revelation 13 and usually fall very short of a terse explanation of “666”, but also to discuss briefly the social implications of the automatic identification trajectory [6].

2. Historical-Critical Method

This paper presents a critical analysis of the background, the sources, and the interpretation of the “number of the beast.” It is an attempt to bridge the gap between the disciplines of history, theology, and information and communication technology. What began as a relatively straightforward examination of the “666” conundrum, taking on board the tried and tested conclusions of recent scholarly research, became a more ambitious and exacting project than first imagined. The challenge in the research was to present a balanced literature review and survey of scholarly works. Given the plethora of views it was important to systematically review as many modern scholars as possible. This paper does not present popular material on the question of “666” but it does point to how ICT is now seen by many as an enabler of the fulfillment of the Seer’s prophecy.
However, it must be underscored, that new popular contributions regarding the “mark” and “666” should be forwarded with caution, for these are highly charged matters not to be lightly entered into. Broadly defined, the methodology underpinning this study is synchronic (with time) as opposed to diachronic (through time). This study can also be considered additive, descriptive and exploratory. Its contribution to the body of existing knowledge is also in presenting comprehensively tested scholarly evidence on the “666” conundrum.

3. Background: Cryptology

Commentators of the Apocalypse of John will generally provide some background information on the “666” puzzle that revolves around the identification system of gematria. Few have ventured further to look at the historical evolution of cryptology in general, to which gematria belongs. There are varying definitions for cryptology, however the one found in F.B. Wrixon's [7] work is a good working definition:

“Cryptology’ (Greek: kryptos, hidden + logos, word)- The science that includes making messages secret (cryptography) and the solving of those messages by those meant to have them (deciphering and decoding) or by third parties, the "opponents", who are not meant to have them."

The following section presents some principal examples of ancient cryptology.

3.1. Some Examples of Ancient Cryptology

The first civilization in recorded history to use what we may refer to, as aspects of primitive cryptology [8], was the Egyptian. The hieroglyphics of early Egypt contained various figures that were altered from their original form. It would appear that this was done to give the symbols some added distinction. Though this was not a code or cipher, as F.B. Wrixon says, it did however, involve a basic principle of cryptology [7, p.15]:

“...namely that of transforming writing. As the Egyptian civilization expanded, hieroglyphics became more involved. Symbols, pictographic representations, and pronunciation became intertwined. With the increasing numbers of carving on special edifices, the once curious populace became disinterested. Egyptologists and others theorize that the official scribes then modified some figures still further in an attempt to regain the public's interest through curiosity.”

The passing on of religious texts and the description of rituals were the primary reasons for why this form of writing was used. Later, even more changes were made by the scribes under the instructions of the priests, who sought not only to protect these sacred texts but to add deference to their own teachings. When distinctive figures were developed for this purpose, "secrecy, another central form of cryptology, became involved” [7, p.15]. This was subsequently taken advantage of by the hierocracy who not long after became aware of this great power to holding the keys of translation. However [7, p.15]:

“...while the Nile's masters had indirectly developed two standard cryptological principles, there are no clear records indicating that they used these methods to conceal diplomatic, commercial, or military gain as a national policy.”

The Greeks however, would improve on the art considerably. Herodotus writes that the warning that saved the Greeks against the planned invasion of Xerxes I, was sent by secret means. Demaratus who had heard that Xerxes was on the march sought to send word to the Spartans. By scraping wax from two wooden tablets he created a functional concealment device. Inscribing all that he knew of the Persian's plans, he then replaced the wax covering [9]. These apparently ordinary tablets were delivered untouched to the Spartan command. Once the tablets were safely in Sparta they were studied by a woman named Gorgo, the wife of the Spartan commander Leonidas, "...she has very strong claims to being the world's first female cryptanalyst” [7, p.19]. The events that followed at the famous battle of Thermopylae are well-known. Herodotus also describes a clever plan by which the heads of slaves were shaved. Secret communications were tattooed on the bald spots: “[t]he letters were not written but tattooed. Histiaios may have learnt the art in Thrace” [10, p.179]. When the hair was restored the shaving process was repeated and the secret communiqué was revealed [11]. Thucydides and Polybius have also documented other concealment methods, including the use of a device called the skytale [12] believed to be the first complete system of transferring secret information, and an encoding device attributed to Aeneas which is known as the elemental transferral. Wrixon [7, pp.19-21], describes the 'skytale' a method of transposition, and the 'elemental transferral' a signaling apparatus combining the physical elements.

We also know that Julius Caesar while building the Roman Empire in Gaul would often communicate with ciphers. Suetonius [13] has described this very well for us,

"[t]hen there are his letters to Cicero; and his private letters to friends, the more confidential passages of which he wrote in cypher: to understand their apparently incomprehensible meaning one must number the letter of the alphabet from 1 to 22, and then replace each of the letters that Caesar has used with the one which occurs four numbers lower- for instance, D stands for A.”
The substitution type cipher that he employed still bears his name today, the Caesar cipher. This was a monoalphabetic substitution with direct standard alphabets. For example, Julius Caesar used the setting in which plain text A was enciphered as D, while Augustus Caesar used that in which plain text A was enciphered as B [14, pp.48-121]. This was not hidden but as J.A. Bielewicz [15, p.6] says, "it was true secret writing or cryptography." The question begs to be asked. Was the Seer of Patmos, the author of the Apocalypse, familiar with Caesar's cipher? We cannot answer with any degree of certainty. But if he was, the use of his own cipher to hide the name of the imperial "beast," extends the application of the conundrum even further- to parody and cynicism.

3.2. Examples from the Old Testament

In the Old Testament (OT) four clear examples of genuine cryptology are those found in the Book of Jeremiah (25:26, 51:1, 51:41) and that in the Book of Daniel (5:25). As William Taylor Smith [16] notes, these are "...examples of a cryptic or cipher mode of writing which come[s] very near the riddle." SHê SHaKH, in Jer 25:26 and 51:14, represented by the three letters shîn, shîn, kaph, are meant to be read with the substitution for each letter of the letter as near the beginning of the alphabet as it is near the end. The intended reading therefore is supposed to be sh=b, sh=b, k=l, that is, Bbl or Babel, the prophet here obviously referring to Babylon. Similarly, in Jer 51:1, the five consonants composing the word Lebkamai: l, b, k, m, y, suggest k, s, d, y, m, that is, Kasdim or Chaldees.

The Daniel piece is the more well known of these very interesting passages, but it differs from the Jeremiah ciphers in that it does not involve the use of substitution. It is rather, as Joyce G. Baldwin and others say, word-play. Baldwin [17, p.123] writes,

"[t]he three terms, Mene, Tekel and Parsin were meaningful to readers of Hebrew and Aramaic and did not represent some strange tongue, as they do for most modern readers. For the king the difficulty was not to give the 'dictionary definition' of the terms, but to see what significance they had for him. It is nevertheless a fact that scholars have had the added task of identifying the words and their original connotation. This is not made easier by the oriental love of word-play, so that one cryptogram can convey a world of meaning."

During King Belshazzar's "great feast for a thousand of his lords" (Dan 5:1), and in the midst of all the revelry came a dire prediction of doom. This came in the form "of a man's hand [that] appeared and wrote on the plaster of the wall of the king's palace" (5:5). Daniel owing to his reputation "to interpret dreams, explain riddles, and solve problems" (5:12) was summoned to the palace to "show the interpretation." The cryptic words that were inscribed on the wall were: MENE, MENE, TEKEL, and PARSIN, (with the conjunction written Upharsin). John J. Collins [18, p.253f] argues that the story retains some of the basic character of the folk tale:

"The story of the mysterious writing on the wall retains some of the basic character of the folk tale, a traditional narrative set in the mysterious world of fantasy. As in chap. 2, the plot reflects the pattern of the tale of court contest: (i) The king is confronted with mysterious signs, (ii) The wise men fail to understand, (iii) Daniel succeeds where they fail, (iv) Daniel is exalted to high rank. The mysterious signs constitute a riddle, a favorite test of wisdom in ancient court tales- compare 1 Kgs 10:1, where the queen of Sheba came to test Solomon with riddles, and Ahikar's encounter with the king of Egypt. It is of the essence of a riddle that it is difficult to resolve, and interest is focused on the drama of interpretation. There can be no real doubt that any form of this story that culminated in the mysterious writing included the motif of the test of wisdom."

4. The Infamous “666” Cryptogram of the Seer of Patmos

Nonetheless, ever since the Seer of Patmos put down his own famous cryptogram on the “number of the beast”, it has continued to exercise throughout the centuries and in equal degree, popular imagination, cloistered piety, and scholarship [19]. From classical antiquity its intrigue and fame can only be considered against that held by the riddle of the Sphinx. In Greek mythology the Sphinx (the daughter of Typhon), sat before one of the gates of Thebes and killed every passerby who could not solve the riddle she posed: “What goes first on four, then on two, and finally on three legs?” When Oedipus solved the riddle, the Sphinx plunged into an abyss and Thebes was liberated from her death grip (the answer was “man”) [20, p.273].

The 13th chapter of the Apocalypse, which speaks of the two infamous beasts, introduces the puzzle: “This calls for wisdom: let him who has understanding reckon the number of the beast, for it is a human number, its number is six hundred and sixty-six” (Rev 13:18).

4.1. To Count or to Calculate

One of the key words here is γραφεῖν (21), generally rendered count (ASV) or calculate (NRSV) by most of the English versions. However, the RSV prefers
reckon. A more precise translation of the Greek, and the one that this author favors, is to count. It is probably for this reason that E. W. Bullinger distinguishes between enumeration and computation [22, p.439f]. “Whatever the solution the way to reach it” as Robert L. Thomas well underscores, “is by counting” [23, p.183]. In the New Testament (NT) two other instances of arithmetical computation, in the sense of calculate [24, p.723], are found. These are the reference in Lk 14:28, “and count the cost” and the other in Acts 19:19, “and they counted the value of them.” This is very important, for it would make it unlikely that what we have here is simply a case of broad symbolism. R. L. Thomas [23, p.183] and others, including Gerhard A. Krodel and Charles T. Chapman, argue that we cannot connect to the Apoc’s words a general meaning involving no arithmetic complexities:

“It [symbolic interpretation] ignores the command to ‘count,’ and it overlooks the writer’s intention that the number be understood well enough to identify an individual from it. General numerical symbolism cannot yield the identity of a specific person.”

4.2. For it is a Human Number

Secondly, and what is most important, we have to deal with both the proper rendering, and the probable meaning of, αριθµός γαρ ανθρώπου εστίν. The English Versions generally agree in their translation but with one very significant difference in nuance (Table 1).

<table>
<thead>
<tr>
<th>Version</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>KJV</td>
<td>for it is the number of a man</td>
</tr>
<tr>
<td>NKJV</td>
<td>for it is the number of a man</td>
</tr>
<tr>
<td>1901 ASV</td>
<td>for it is the number of a man</td>
</tr>
<tr>
<td>RSV</td>
<td>for it is a human number</td>
</tr>
<tr>
<td>NRSV</td>
<td>for it is the number of a person</td>
</tr>
<tr>
<td>NASB</td>
<td>for the number is that of a man</td>
</tr>
<tr>
<td>NIV</td>
<td>for it is a man’s number</td>
</tr>
</tbody>
</table>

All the translations could allow for the understanding that the number could properly belong to one specific and defined individual. The rendering of the Revised Standard Version (RSV) however, though not excluding such an interpretation, certainly discourages it. By preferring ‘human’ instead of ‘man’ the emphasis is taken away from a specific person and the number is applied to humankind in general, and so denoting more of a general symbol of apostasy rather the number of that man who will head that apostasy.

There are two other modern translations whose witness must be considered before an examination of the Koine Greek text itself (the “common” Greek in which the NT was written and the lingua franca of the Hellenistic age). One is the interpretation of the esteemed Greek Orthodox theologian and formerly professor at the School of Theology, Athens University, P. N. Trembelas (1886-1977). In his parallel commentary to the Greek NT text, Trembelas [25, p.1033] states two critical things, and these clearly. First, that the number so signified is that of the Antichrist, who is the beast; and second, that the number itself, is the number of this antichrist, the number of a man (meaning “the antichrist”) and not of some other supernatural or superhuman person.

The second Modern Greek version witness is that provided by the translation of the Koine Greek text into the contemporary Greek language and idiom by six other Greek Orthodox NT scholars (and specialists in NT hermeneutics), from the Universities of Athens and Thessaloniki [26, p.501]. Their work unlike that of Trembelas is not a running commentary of the text, so there is not so much strict exegetis here as there is an attempt for a faithful rendering of the ancient text into the Modern Greek vernacular. They translate “which (the number) denotes a person.” The translators also use λογαριάσει for ψηφιστώς which literally means to ‘add up’ or to ‘work out’.

The ancient text itself, may seem unclear on what the original intent of the author was, but on examination a probable meaning would appear to come to surface. To begin with, the conjunction “for” points to the reason why this calculation/reckoning should be made. It is because it is “a human number”. According to Thomas [23, p.184], the confusion that has reigned behind the rendering of “[i]t is the number of a man” is because it:

“has two possible meanings. It can mean that it is a humanly intelligible number or that it is the number of a certain individual. The former possibility takes ... human as an adjectival genitive to mean that the number is easily understandable by anyone with a fair measure of wisdom. This same word... has this meaning in Rev 21:17 in speaking of ‘a human measure.’ Yet it is not valid to use 21:17 as a criterion, because in that verse an angel is the measurer, creating the need for the sense of ‘a humanly understood measure.’ To say something is humanly understood here is pointless. It raises the unanswerable question, what is a nonhuman number? The inescapable conclusion is that the expression means this is a mysterious hint about a man whose name gives the number 666.”

4.3. This Calls for Wisdom: let him who has understanding (Rev 13:18)

Despite all the apparent complexities that are bound up with the mystery of the number, the author of Revelation
5. Dominant Interpretations: Who is “666”?!

Serious interpreters, as my review of the relevant literature will reveal, may differ as to their conclusions but they will generally “identify a system of coding and interpretation used by the author” and then proceed to their analysis and exegesis of the text [30, p.165]. Jürgen Roloff describes the three most dominant interpretations: (i) interpretation as gematria, (ii) symbolic-theological interpretation, (iii) arithmetic interpretation [30, pp.165-167].

5.1. Interpretation as Gematria

In Greek the equivalence of gematria is sometimes referred to as isosephia (from the Gk words for equal and count), one of its uses was to make connections between two words or phrases which had equal numerical calculations. But the term is often explained as an adaptation of the Greek word gematria. Gematria, or numerical riddle, is [33]:

“the use of the letters of a word so as by means of their combined numerical value to express a name, or a witty association of ideas... [t]here is only one clear example in Scripture, the number of the beast which is the number of a man, six hundred sixty and six (Rev 13:18).”

Each letter in both the Hebrew and Greek alphabets had a corresponding numerical value, (there were not enough letters in the Greek alphabet so a few obsolete letters and signs were introduced into the system) [34, p.1]. [31, p.35]. As Fiorenza explains,”[i]t was easy to transcribe letters into numbers but almost impossible to reverse the procedure if the meaning was not already known, since many possible words might add up to a given number” [35, p.86f]. Thus, it was not an easy task to decipher the number because each number could consist of many varied combinations of numerical letters. By adding the numerical values of the letters in the puzzle, the name could be discovered. An often quoted graffito and a good example of gematria, cited from G. Adolf Deissmann, is that from Pompeii. This puzzle reads, “I love her whose number is 545” [36, p.277]. The most “striking example”, as Robert H. Mounce appropriately calls it, is found in the Sibylline Oracles where the name of Jesus in Greek is given as 888 [37]:

“Then indeed the son of the great God will come, incarnate, likened to mortal men on earth, bearing four vowels, and the consonants in him are two. I will state explicitly the entire number for you. For eight units, and equal number of tens in addition to these, and eight hundreds will reveal the name...”

ΙΗΣΟΥΣ has a numerical equivalence of 888:

| I = 10, H = 8, Σ = 200, O = 70, Υ = 400, Σ = 200 |

In the same book [38] there is the numerical riddle on the name of God:

“I am the one who is, but you consider in your heart: I am robed with heaven, draped around with sea, the earth is the support of my feet, around my body is poured the air, the entire chorus of stars revolves around me. I have nine letters, I am of four syllables. Consider me. The first three have two letters each. The last has the rest, and five are consonants. The entire number is: twice eight plus three hundred, three tens and seven. If you know
who I am you will not be uninitiated in my wisdom.”

The "formulation" of Rev 13:18 would indicate, as Jürgen Roloff argues, "that such a numerical riddle is also present here" [39, p.166]. Based on the numerical system of the Hebrew alphabet “666” is the number of Neron Caesar (pronounced Neron Kaisar). It would be written:

```
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>qsr</td>
<td>resh</td>
<td>waw</td>
</tr>
<tr>
<td>qoph</td>
<td>samekh</td>
<td>resh</td>
</tr>
</tbody>
</table>
```

nrwn qsr (\(nun = 50 + resh = 200 + waw = 6 + nun = 50 + qoph = 100 + samekh = 60 + resh = 200\))

Objections to this solution, that a defective spelling was required in the writing of the Hebrew word for Caesar [the vowel letter y has to be omitted from qysr], can now be said to be eliminated [39, p.259]. The reason for such declaration by some present commentators is that this variant reading was found in an Aramaic document from Murabet, dated to the "second year of the emperor Nero" [40]. Another objection, that John would not have expected the Christians in Asia Minor to know the Hebrew equivalents of Greek and Latin names, is insubstantial [41, p.220]. Nevertheless, it does not mean that this solution is necessarily correct or that it is the only one. This approach cannot be taken in Greek, “for the Greek Neron [Na pov] yields a total of 1,005." [29, p.175]. But interestingly, it is the Greek Neron Kaisar, that results in the required “666", but only after it has been transliterated into the Hebrew script. Also worthy of note, is the observation that the numerical value of the Greek word for beast [\(\eta\pi\sigma\omicron\omicron\nu\)], written in Hebrew letters, also amounts to 666 [30, p.166]. Table 2 plainly shows that those commentators who argue for the gematria method of interpretation favor Nero Caesar as the solution [42, p.387], [43, p.129f].

5.2. Symbolic-Theological Interpretation

Saint Irenaeus also lends his witness to this method of interpretation in several ways. First, he understands "666" to be the recapitulation [44, p.6] of evil:

"...that is, six times a hundred, six times ten, and six units. [He gives this] as a summing up of the whole of that apostasy which has taken place during six thousand years” [45].

And furthermore:

“And there is therefore in this beast, when he comes, a recapitulation made of all sorts of iniquity and of every deceit, in order that all, apostate power, flowing into and being shut up in him, may be sent into the furnace of fire. Fittingly, therefore, shall his name possess the number six hundred and sixty-six,¹ since he sums up in his own person all the commixture of wickedness which took place previous to the deluge, due to the apostasy of the angels" [46].

But the famous bishop of Lyons, is not content to simply speak of the number in terms of apostate recapitulation, he also finds proof of its utter baseness in Old Testament (OT) symbolism and type:

“For Noah was six hundred years old when the deluge came upon the earth, sweeping away the rebellious world, for the sake of that most infamous generation which lived in the times of Noah. And [Antichrist] also sums up every error of devised idols since the flood, together with the slaying of the prophets and the cutting off of the just. For that image which was set up by Nebuchadnezzar had indeed a height of sixty cubits, while the breadth was six cubits... [f]or that image, taken as a whole, was a prefiguring of this man’s coming, decreeing that he should undoubtedly himself alone be worshipped by all men. Thus, then, the six hundred years of Noah, in whose time the deluge occurred because of the apostasy, and the number of the cubits of the image... do indicate the number of the name of that man in whom is concentrated the whole apostasy of six thousand years, and unrighteousness, and wickedness, and false prophecy, and deception...” [46].

The symbolic interpretation shares the same weakness with the arithmetic approach “in that it fails to do justice to the text and does not come up with the name of a human being” [39, p.258]. A second weakness is that nowhere in the Scriptures is the number six specifically singled out to stand for evil. The serpent may have six names in the OT, but so does the lion. The sixth clause of the Lord’s prayer may relate to sin (Mt 6:12), but it was also “six days later” that Jesus took Peter, James, and John up to the high mountain to witness His transfiguration (Mk 9:2). In the Apoc, the four living creatures who sing praises without ceasing, have six wings (Rev 4:8). This simple fact has often escaped commentators with supporters of this approach reading into the number their own conclusions. It has also escaped the attention of most of these interpreters that the name of the Christ (\(\varphi\pi\omicron\sigma\omicron\omicron\nu\varphi\zeta\)), is itself comprised of six letters [47]! And thirdly, Saint Irenaeus himself, does not limit his interpretation to this approach alone. He is, as we have already noted, also concerned with the gematria of the number. The scholars who support the symbolic method of interpretation, as Table 3 will show, cannot establish their position with reference to the Old Testament. Table 4 shows literature referring to the gematria and symbol position.

¹ The Greek reads χξςξ. The Latin reads sexcentos sexaginta sex.
5.3. Gematria and Arithmetic Interpretation

The basis for the arithmetic interpretation is the idea that 666, unlike 616 which has no “peculiar mathematical characteristics”, is a so-called “triangular number” with the basic value of 8. The numbers 1 through 8 add up to 36; the numbers 1 through 36, when added together, total 666. According to ancient numerical speculations, the same meaning is found in every triangular number as in the last number in the first series. In this instance, in the number 8 [30, p.165]. But 666 is a doubly triangular number for it is also the 'triangle' of 36 (1+2+3...+36=666). As Richard Bauckham explains [42, p.393f]:

“[s]uch doubly triangular numbers are rare: the series runs 1, 6, 21, 55, 120, 231, 406, 666, 1035, 1540...It seems rather unlikely that the number of the beast should be one of these numbers purely accidentally. Moreover, uniquely among these doubly triangular numbers, 666 looks like a doubly triangular number... [t]wo triangles have six sides! But thirdly, 666 is the 'triangle' of a number (36) which is not only triangular but also square (6x6=36). Numbers which are both triangular and square are even rarer than doubly triangular numbers: the first three are 1, 36, 1225. That 666 is the 'triangle' of such a number makes it a very remarkable number indeed. The next such number is 750925 (the 'triangle' of 1225)!”

Though it is possible that John was aware of these peculiarities and to have “exploited them”, by linking for example “666” (Rev 13:18) and “it is an eighth” (Rev 17:11) [42, p.394]. For not only is the number 666 the 'double triangle' of 8, but it is also the eighth 'doubly triangular' number in the series 1, 6, 21, 55, 120, 231, 406, 666 [42, p.396]. But as Jürgen Roloff and others have correctly pointed out “this interpretation falters” [30, p.165f] in that according to Rev 13:18 at issue is "a human number". The explanation then, at least on the first level, would have to be a name. The arithmetic method of interpretation is not favored by many interpreters, and it is invariably coupled to a second interpretation (Table 5).
Table 2. “666” Interpreted Using Gematria - Review of Literature

<table>
<thead>
<tr>
<th>Who is the Beast?</th>
<th>A Capsule Summary and Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nero Caesar</td>
<td>&quot;It is in the use of this method [gematria] that our author gives the name of the Beast as 666&quot; [48, p.403].</td>
</tr>
<tr>
<td>Nero Caesar</td>
<td>&quot;We are, therefore, thrown back on Nero redivivus... [t]he solution is to be sought not in Greek but in Hebrew&quot; [49, p.367].</td>
</tr>
<tr>
<td>Nero Caesar</td>
<td>&quot;In Nero, and the spirit of Nero revived in Domitian, lay all the evil of Caesar-worship with which the Church was faced&quot; [50, p.74].</td>
</tr>
<tr>
<td>Nero Caesar</td>
<td>&quot;The name 'Nero Caesar', written in its Greek form, yields the exact number 666&quot; [51, p.83].</td>
</tr>
<tr>
<td>Nero Caesar</td>
<td>&quot;There is little doubt that the number of the beast stands for Nero; and that John is forecasting the coming of Antichrist in the form of Nero, the incarnation of all evil, returning to this world&quot; [52, p.102].</td>
</tr>
<tr>
<td>Nero Caesar</td>
<td>&quot;The number 666 alone would be far from conclusive in indicating Nero, but strong support is given by the fact that so many other factors in these chapters point to him&quot; [53, p.83].</td>
</tr>
<tr>
<td>Most probably Neron Kaisar.</td>
<td>&quot;Whatever else may remain obscure, there can be no doubt about the method by which John invites his intelligent readers to calculate the number. He is using the device known to the Jews as gematria, but practised by Greeks as well as Jews&quot; [29, p.174].</td>
</tr>
<tr>
<td>Definite person known to the Seer's audience.</td>
<td>&quot;In view of the widely divergent and highly speculative solutions to the riddle it seems best to conclude that John intended only his intimate associates to be able to decipher the number&quot; [54, p.265].</td>
</tr>
<tr>
<td>Caesar Nero</td>
<td>&quot;...most plausible is that 666 is the number of Caesar Nero on the basis of the Hebrew alphabet&quot; [39, pp.258-9].</td>
</tr>
<tr>
<td>Name was known to the original audience</td>
<td>&quot;It was easy to transcribe letters into numbers but almost impossible to reverse the procedure if the meaning was not already known, since many possible words might add up to a given number&quot; [35, p.86].</td>
</tr>
<tr>
<td>Nero Caesar</td>
<td>&quot;It seems almost certain, particularly in the light of the Nero motif apropos of the beast's healed wound (13:3a, 12), that the name is 'Nero Caesar&quot; [55].</td>
</tr>
<tr>
<td>Caesar Nero</td>
<td>&quot;Thus, we return to the consensus and agree that the only plausible name is that of 'Caesar Nero'&quot; [56, p.174].</td>
</tr>
<tr>
<td>Neron Caesar</td>
<td>&quot;...the title Neron Caesar in Hebrew does in fact add up to 666. Such an interpretation fits well with the thrust of the passage&quot; [57, p.112].</td>
</tr>
<tr>
<td>Neron Kaisar</td>
<td>&quot;By adopting the interpretation of 'Neron Kaisar' we get an answer totally consistent with everything else we've seen in Revelation...&quot; [58, p.90].</td>
</tr>
<tr>
<td>The solution must necessarily fit the first century of our era.</td>
<td>&quot;First, priority must be given to solutions derived from the Greek alphabet, since John wrote in Greek&quot; [31, p.39].</td>
</tr>
<tr>
<td>To help in the identification of the false Christ when he becomes a public figure.</td>
<td>&quot;In applying gematria, however, a precaution offered long ago by Irenaeus is necessary. The identity of the person represented by the number 666 should not be a subject of speculation until that person arrives on the earthly scene&quot; [23, p.183f].</td>
</tr>
<tr>
<td>Who is the Beast?</td>
<td>A Capsule Summary and Reference</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>It is the number of Man, for the beast glories in his [the man's] rebellion.</td>
<td>&quot;The number of the beast is six hundred sixty-six, that is, failure upon failure upon failure!&quot; [59, p.182].</td>
</tr>
<tr>
<td>666 is not the number of an individual person. Gematria has nothing to do with the number; we are not dealing here with an insoluble conundrum. (Particularly critical of Zahn and Ruehle).</td>
<td>&quot;This is the number 6, plus its multiple by 10, namely 60, again plus its multiple by 10×10 (intensified completeness), namely 600- thus 666, three times falling short of the divine 7. In other words, not 777, but competing with 777, seeking to obliterate 777, but doing so abortively, its failure being as complete as was its expansion by puffing itself up from 6 to 666... [t]he mark they bear, this '666', is that of complete, and not merely of partial, opposition to Christ...&quot; [60, p.412].</td>
</tr>
<tr>
<td>In no sense would knowledge that 666=Nero have enhanced the wisdom of John's readers or enabled them to penetrate the fraudulent claims of the Dragon. Minear is especially critical of the Nero redivivus interpretation.</td>
<td>&quot;His number is 666' is the heaping up of the number 6. Because of its contrast to 7 we may be content with an interpretation which sees 666 an allusion to incompleteness, to the demonic parody on the perfection of 7, to the deceptiveness of the almost-perfect, to the idolatrous blasphemy exemplified by false worshipers, or to the dramatic moment between the sixth and seventh items in a vision cycle... [i]n short, none of the key terms of 13:18- name, number, man, 666- requires the effort to find an emperor the letters of whose name will add up to a total of 666&quot; [61, p.258].</td>
</tr>
<tr>
<td>The number represents a persistent falling short of all that is good. It is typical of the unregenerate man.</td>
<td>&quot;If we take the sum of the values represented by the letters of the name Ιεςους, the Greek name 'Jesus', it comes to 888. Each digit is one more than seven, the perfect number. But 666 yields the opposite phenomenon, for each digit falls short... John will then be saying that unregenerate man is persistently evil. He bears the mark of the beast in all he does&quot; [62, p.174].</td>
</tr>
<tr>
<td>666 is the ultimate symbol for all that opposes the will of God.</td>
<td>&quot;...it is the epitome of all rebellion against God. Just as the number seven is the sign of perfection, the number six is the opposite. Here we have six hundreds, six tens and six units&quot; [63, p.78].</td>
</tr>
<tr>
<td>Man's number, the Emperor of Rome as the type.</td>
<td>&quot;More certain, however, is the significance of the numbers. The dragon and the sea beast each have seven heads (12:3; 13:1); they present themselves as divinely wise. But seven is God's number, eternal and divine; six is merely human, man's number. In this context six is an evil and pretentious approximation; triple six perhaps represents the evil trinity of the dragon, the sea beast and the land beast, posturing as God&quot; [64, p.112].</td>
</tr>
<tr>
<td>False religion</td>
<td>&quot;The number 666 does not mean Nero or Caligula or Rome. It simply means the beast, false religion&quot; [65, p.131].</td>
</tr>
<tr>
<td>Six, the diminished seven...</td>
<td>&quot;In the symbolism of the Apocalypse this [666] can be construed as the sixth head of the scarlet beast, the sixth head of the beast from the sea, and the sixth head of the great red dragon&quot; [66, p.250].</td>
</tr>
<tr>
<td>666 is the counterfeit of the divine Trinity.</td>
<td>&quot;...this pseudo-trinity is that of Satan (the dragon) plus antichrist (the first beast) plus the false prophet (the second beast)...&quot; [67, p.155].</td>
</tr>
<tr>
<td>Portrays a spiritual condition.</td>
<td>&quot;The mark stands for the beast. In such a case, the number six would stand in contrast to the number seven, God's number. Six would then be what comes the closest to perfection but falls short in each of its digits. The three digits could thus represent a trinity of imperfection: the dragon, the beast, and false prophet. Partaking of the mark signifies spiritual devotion to the beast&quot; [68, p.151].</td>
</tr>
<tr>
<td>Human greed</td>
<td>&quot;This human greed, it will be easily guessed, is the real mark of the beast, that mysterious six six six that represents imperfection...&quot; [69, p.66].</td>
</tr>
<tr>
<td>Michael's position interprets the number as a part of the historical expression of evil.</td>
<td>&quot;Perhaps the most that can be said on the basis of chapters 12-13 alone is that the Beast is the agent, or historical expression on earth, of the Dragon (Satan), in much the same way that the Lamb is the agent, or historical expression, of...&quot;</td>
</tr>
</tbody>
</table>
The author is urging the deciphering not of the number but of the meaning of the number, which is ever imperfect... "The aim is to interpret the meaning of the number, not to decipher the name that the number expresses. Since the number six means imperfection or lack and seven expresses perfection or fullness, 666 would accordingly mean utter imperfection or lack. Six is repeated three times because it is an asymptotic number, it is ever imperfect, to the infinite..." [71, p.112f].

666 is the sum of all apostate power. "...how are we to understand 666? The best way is to... return to one of the most ancient interpretations, that of Irenaeus.... that the beast is the sum of "all apostate power," a concentrate of six thousand years of unrighteousness, wickedness, deception, and false prophecy" [72, p.139].

The number is symbolic of all that which parodies the Divine, and so always falling short of God. "...666 is then the number of man pretending to be God (cf. Mk 13:14, 2 Thess 2:4) or falling short of God" [73, p.47].

### Table 4. “666” Interpreted Using Gematria and Symbol - Review of Literature

<table>
<thead>
<tr>
<th>Who is the Beast?</th>
<th>A Capsule Summary and Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nero Caesar. Other interpretations might be combined. Esp. the symbolic.</td>
<td>&quot;If the number represents a name, the name is doubtless to be sought among the θηρία of the first century... Certainly Nero Caesar suits the context well... [a]nother line of interpretation may perhaps be combined with this... [the symbolic]&quot; [74, p.176].</td>
</tr>
<tr>
<td>666 is the ultimate sign of our limitation as human beings.</td>
<td>&quot;[John] gives the name of the beast in symbolic form, using a device known in the ancient world as gematria... it is possible that 666 is intended to be a symbolic number for the best that man can do, which falls short of adequacy&quot; [75, pp.186f].</td>
</tr>
<tr>
<td>Two levels of interpretation: a. Nero Caesar, and b. symbolic.</td>
<td>&quot;On one level of meaning, this is very likely a cryptic reference to Nero... [o]n another level of meaning, the number 666 has symbolic connotations&quot; [76, p.97].</td>
</tr>
<tr>
<td>Antichrist of Satan. 666 will always fall short of the ideal 777.</td>
<td>&quot;...gematria enabled word-plays or arithmetic puns to be made. It has long been realized that 666 is eminently suitable to characterize the Antichrist, since it implies a consistent falling short of the divine perfection suggested by 777&quot; [41, p.220].</td>
</tr>
<tr>
<td>Perhaps Teitan, the personified Roman Empire.</td>
<td>&quot;...Irenaeus goes beyond any identification of a single person, and reading 666 as equal to Teitan interprets the beast as an expression of historical and human power (the Roman Empire) which, driven by inordinate pride and under the influence of an even greater pride (the dragon), moved to attack the divinity. This seems to be the best line of approach...&quot; [77, p.239].</td>
</tr>
<tr>
<td>The number is symbolic of the significance of the name. But Boring also acknowledges the likely use of gematria.</td>
<td>&quot;The number 666 has a generic significance that made it particularly appropriate for John's purpose. John shares the broad apocalyptic tradition in which seven is the complete number, and has used it as such throughout. The seventh seal, trumpet, and bowl is always the last, that represents the coming of God and his kingdom. But six is often the penultimate number, the number of lack and incompleteness. It is also the number of judgement... the judgement of God comes in the sixth seal, trumpet and bowl... [y]et it is likely that John intended his readers to think of a particular individual, one already known to them [Nero]...&quot; [32, pp.162f].</td>
</tr>
<tr>
<td>Neron Caesar</td>
<td>&quot;There are three triads in the vision: Holy, Holy, Holy (4:8); woe, woe, woe (8:13); and six, six, six (13:18). The triad of the nature of God could be contrasted with the triad of the nature of the Beast, with the woes being the result of the encounter between the two&quot; [78, p.239].</td>
</tr>
<tr>
<td>Probably Neron Kaisar, given the contempt that he was held in by both the Christian and Jewish communities.</td>
<td>&quot;But human is literally of a man, and it may mean just that- most probably (already by gematria reckoned as 'matricide').... [i]t was probably an identification made by Jews or Jewish-Christians- in the eyes of both groups Nero had earned the title of Antichrist- and valued for the qualities of the number [666] itself...&quot; [79, p.217f].</td>
</tr>
</tbody>
</table>
Who is the Beast? A Capsule Summary and Reference

Caesar Nero, but an equally symbolic interpretation cannot be ruled out.

"As a whole, the gematric interpretation of the number as referring to the Caesar Nero seems to provide the key to resolving the riddle. Moreover, this explanation fits naturally into the context (vv. 3, 12-13). By no means should one rule out the possibility that John also wanted to point his readers to a symbolic interpretation of the number..." [30, p.167].

Neron Caesar

"The number "six hundred sixty-six" is, in the first place, a symbol of the greatest imperfection, for it is the sacred number seven less one, repeated thrice" [80, p.76].

Neron Kaisar

"One may not rule out a generic significance in the number 666. If seven is the perfect number, then six is the penultimate, incomplete number - "six-six-six" being emphatically negative" [81, p.144].

Nero Caesar. But whatever it is that this number describes, it is fatally flawed.

"The prophet of Patmos places an evaluation upon Roman imperial power as symbolized by Nero: 666, the ultimate in imperfection..." [82, p.58].

Neron Kesar. The number reveals the fundamental essence of the beast, this is the true significance of 666.

"It seems that John was doing more than simply making the statement: the emperor Nero is the beast. He is saying something about the very nature of the beast...the focus is more on the significance of the number itself than on who the number stands for" [28, p.227].

### Table 5. “666” Interpreted Using Gematria and Arithmetic - Review of Literature

<table>
<thead>
<tr>
<th>Who is the Beast?</th>
<th>A Capsule Summary and Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Beast is Nero Caesar. The peculiar mathematical characteristics of 666 must be noted.</td>
<td>&quot;If, as the manuscript evidence strongly suggests, John himself preferred the number 666, this was probably because there are further mysteries hidden in this number. Unlike 616, 666 has peculiar mathematical characteristics. It is a doubly triangular number...&quot; [42, p.390].</td>
</tr>
<tr>
<td>Nero, Titus, or Domitian are all candidates. The mathematics might be symbolic of that infinite distance which separates our potential from that of our Creator.</td>
<td>&quot;In the context where the arrogance of Rome and the blasphemy of the Imperial Cult are condemned, several possible solutions of 666 are relevant: Nero's name in Hebrew, or the emperors Titus or Domitian in Greek... the mathematics could then symbolize pushing human ambition to its furthest limits away from God&quot; [44, p.62].</td>
</tr>
</tbody>
</table>

5.5. Other Interpretations

In this group of interpretations we note two directions. The historical-critical and the speculative futurist. The first group has made some important contributions to the discussion of the interpretation of the number. Some of the names that can be placed here are Henry A. Sanders [83], Ethelbert Stauffer [84], Stanislas Giet [29, p.175], Evert M. Bruins [85], W. G. Baines [86], Michael Topham [87].

The other interpretations have associated the number with the atomic bomb, the World Bank, the Society for Worldwide Interbank Telecommunications (SWIFT), The World Council of Churches, the Ecumenical Movement, The Papacy, The Teamsters, The Council on Foreign Relations, The United Nations, The European Community, The Trilateral Commission, The Apollo 8 space mission, the signing of the 1957 Treaty of Rome, Communism, Masonism, media conglomerates, and even Esperanto, the list is endless [88, pp.225-290]. Or individuals such as Plato, Napoleon, Hitler, Mussolini, Saddam Hussein, John Kennedy, Sun Myung Moon, Mikhail Gorbachev, Henry Kissinger (his name in Hebrew adds up to 111 (666 divided by 6) and even Ronald Wilson Reagan (six letters in each of his names). Again, the list is endless and limited only by the imagination [39, pp.26-28], [89, p.1].

More recently, Orthodox theologian Professor George Mantzaridis, suggested that χξς' refers to the phrase "Χριστός ξένος σταυροῦ" (Christ foreign to cross). According to Mantzaridis' interpretation "anyone who is unwilling to suffer for Christ or prefers worldly pleasures instead of Christ's Cross is Antichrist" [90]. Constantine Tsirpanlis has also noted that some Modern Greek theologians believe in the symbolic meaning of the reverse number, 999. This corresponds to the name "ΤΡΙΑΔΙΚΟΣ ΘΕΟΣ" (TRINITARIAN GOD). According to these interpreters "those who reject the dogma of TRINITARIAN GOD and CHRIST'S GODHOOD are the Antichrists" [90].
5.6. Findings from the Survey: “666” was probably Nero Caesar

Irrespective of the system of coding or symbolism argued for by individual scholars, the beast identified by the number 666 will invariably be or stand for a type of Nero (AD 37-68). The fifth Roman emperor, chiefly remembered for his unstable character and cruelty, and for the conflagration of Rome [91, p.148], [92, p.379]. T. F. Glasson’s quoted remarks in the survey typify the consensus that Nero lies behind the mysterious number [53, p.83]:

“The number 666 alone would be far from conclusive in indicating Nero, but strong support is given by the fact that so many other factors in these chapters point to him.”

Other names proposed such as Lateinos, the Roman Empire; or Teitan (the Titans of Greek mythology who hurled Uranus into Tartarus), do not have strong scholarly support. Two reasons for some continued support of these names is that they were mentioned early as possibilities by Irenaeus (AD 130-200) [93], and by Hippolytus (AD 170-235) [94]. A second reason is that neither of these names depends on a transliteration back into the Hebrew script. Another possibility Evanthas, a name which we cannot identify, is also mentioned by both of these ancient writers.

In summary then, the survey plainly reveals that there are three strong alternatives for what we are to make of “666”. The original text, however, can support all three:

1. “666” is Nero[n] Caesar
2. “666” is the number concealing the name of the future antichrist.
3. “666” stands for the sum of apostate power and of evil.

6. The Methods of Interpretation as Separate Elements

A precise and systematic way to describe this problem of interpretation of "the number of the beast" is to understand the three most common methods of interpretation as separate elements. Each of these methods is then considered an element belonging to the interpretation of the number of the beast:

<table>
<thead>
<tr>
<th>Interpretation of the Number of the Beast {Gematria, Arithmetic, Symbolic-Theological}</th>
</tr>
</thead>
</table>

Each method or approach considered on its own or in combination with another system of interpretation can succeed in part to explain the mysterious number “666” but some explanations are more conclusive and workable than others. In analyzing the number, scholars have used one or more of these approaches. Each distinct method of interpretation has either been wholly or partially attributed to explaining the number of the beast. Choosing, however, a subset from the set Interpretation of the Number of the Beast will at best only equate to part of the answer, it will not offer the total view nor the intended extensions of the Seer’s conundrum. For as it has been shown, the number itself is a cryptogram comprising of various elements.

To illustrate the various stances held by scholars regarding the number “666”, now that the review is completed, the following analysis and pictorial representation is possible. The power set [95] of the set Interpretation of the Number of the Beast has been presented, this is the collection of all subsets of the set:

```
{{}, {gematria}, {arithmetic}, {symbolicTheol}, {gematria, arithmetic}, {gematria, symbolicTheol}, {arithmetic, symbolicTheol}, {gematria, arithmetic, symbolicTheol}}
```

This collection of subsets (individually or as a combination) can be expressed by one of the following four approaches:

6.1. Approach 1: The Non-Traditional Model

Do not hold to any one of the three elements. The subset with no elements denoted by {} is the empty set. This subset represents the view held by some commentators to ignore all of the three most common methods of interpretations as non deterministic resolutions to solving “666”. An empty set usually suggests that an interpreter has either taken a radical stance on the question of “666” or has opted to support a weak argument. Anyone who opposes all three elements of the set are leaving themselves open to attack because there is substantial historical evidence to support at least one of the three common methods. This position has little to commend itself and is usually characterized by the futurist interpretation of Revelation. Diagrammatically, it can be shown as in Figure 1.
6.2. Approach 2: Single Interpretative Model

Hold to only one element as the real answer. The subsets containing only one element from the set ({gematria} or {arithmetic} or {symbolic-theol}), indicate those scholars who take the stance that only one method of interpretation is correct in the explanation of the number “666”. This approach is also flawed because it implies that all other alternative interpretations are not to be considered as possible solutions to explain the number when evidence points to the contrary (Figure 2).

6.3. Approach 3: Combinative-Interpretative Model

Hold to a combination of elements. The subsets containing two or more elements ({gematria, arithmetic} or {gematria, symbolic-theol}, {arithmetic, symbolic-theol} or {gematria, arithmetic, symbolic-theol}) represent the most common approach to solving the mystery of the number. These commentators are aware of the most important methods of interpretation and believe that a combinatorial approach is necessary to better comprehend the number “666”. The dynamics of the cryptogram are more fully recognized (Figure 3).

6.4. Approach 4: Comprehensive-Interpretative Model

The Seer’s cryptogram belongs to a tradition of cryptology common to the ancient world. More specifically, his conundrum relates to gematria, a system of encryption well known to the Greek, to the Romans, and to the Jews of the author's time. However, through deliberate application (not "helpful happenstance") [28, p.227], the "number of the beast" (666) also extends into the world of symbolism, riddle, and arithmetic. Evil has many dimensions, the Seer aware of this, selected a sign [96, p.826] to represent this miscellany of wickedness, a symbol that could be applied and understood in different settings. John makes use of his demonstrated textual resourcefulness to fuse these elements together. But this conclusion is not to open the "number" to a multiplicity of interpretations or approaches; this in itself would also defeat the purpose of the Seer's use of the symbol, conundrum, cryptogram. His symbol is rich in meaning and in application, but it is defined and created from within the writer's own background and literary influences. The limits of the systems available to him are through extension, the limits of the interpreters' exegesis. By exploring the background we can cull the possible from the probable motivations behind the creation of the number.

It must always be remembered that the reason for the calculation is because it is “a human number” (Rev 13:18). The model presented below (Comprehensive-Interpretative) though deriving from the third approach (Combinative-Interpretative), differs in the following important respects:

(i) it clearly acknowledges the importance of each interpretation and describes their integration into the “666” complex;
(ii) it emphasizes the origin of the symbol (gematria);
(iii) it introduces the Danielic source of the riddle; and finally
(iv) it acknowledges that this approach is not an open system and that exegetical limits based on background and literary evidence have to be applied.

The model fittingly demonstrates the 'extensiveness' of the symbol, that is, its polyvalent nature, and equally describes the imaginative networking of the Seer. It also serves to lessen the tension that one approach alone brings to the question. The term cryptogram [97, p.50] is the word that best describes the end result of the integrating of all the four elements. A cryptogram has a secret meaning and can be made up of different elements. In the context of the Seer's puzzle all the following elements come into play (Figure 4).
7. Some Christians Opting-out of the Ultimate ID Trajectory

Ever since the bar code symbology UPC (Universal Product Code) became widespread some Christian groups have linked automatic identification technologies to “the mark” in the Book of Revelation (13:18) for “the number of the beast… is six hundred and sixty-six.” [98], [99]. Coincidentally, the left (101), centre (01010) and right (101) border codes of the Universal Product Code (UPC) bars are encoded 6, 6, 6. As it is now an established standard for every non-perishable item to be bar-coded there was a close association with the prophecy: “so that no one can buy or sell unless he has the mark…” (Rev 13:17). In full, verses 16-18 of Chapter 13 of Revelation read as follows:

“Also it causes all, both small and great, both rich and poor, both free and slave, to be marked on the right hand or the forehead, so that no one can buy or sell unless he has the mark, that is, the name of the beast or the number of its name. This calls for wisdom: let him who has understanding reckon the number of the beast, for it is a human number, its number is six hundred and sixty-six.”

According to some Christians, this reference would appear to be alluding to a mark on or in the human body, the prediction being made that the UPC would eventually end up on or under the human skin [100]. As the selection environment of automatic identification devices grew, the popular interpretation of the prophecy further developed as to the actual guise of the mark. It was no longer interpreted to be ‘simply’ the bar code. Some of the more prominent religious web sites (some accessed as far back as 2000), that have discussed auto-ID in connection to the number of the beast are shown in Table 6. At first the web sites focused on bar code technology, then on biometrics, and more recently the looming human implantable microchip.

Card technology such as magnetic-stripe and smart cards became the next focus as devices that would gradually pave the way for a permanent ID for all citizens globally: “Also it causes all, both small and great, both rich and poor, both free and slave, to be marked on the right hand or the forehead” (Rev 13:16). Biometrics was then introduced and immediately the association was made that the “mark” (\textit{charagma}) would appear on the “right hand” (i.e. palmprint or fingerprint) or on the “forehead” (facial/iris recognition) as was supposedly prophesied (Rev. 13:16). For the uses of “charagma” in early Christian literature see Arndt and Gingrich [101] 876. Short of calling this group of people fundamentalists, as J. D. Woodward [102] refers to one prominent leader, Privacy International’s Simon Davies is more circumspect [103]:

“I think they’re legitimate [claims]. People have always rejected certain information practices for a variety of reasons: personal, cultural, ethical, religious and legal. And I think it has to be said that if a person feels bad for whatever reason, about the use of a body part then that’s entirely legitimate and has to be respected”.

Finally radio-frequency identification (RFID) transponders made their way into pets and livestock for identification, and that is when some Christian groups announced that the ‘authentic’ mark was now possible, and that it was only a matter of time before it would find its way into citizen applications [104]. Terry Cook, for instance, an outspoken religious commentator and popular author, “worries the identification chip could be the ‘mark of the beast’, an identifying mark that all people will be forced to wear just before the end times, according to the Bible” [105]. The description of an implant procedure for sows that Geers et al. gives, especially the section about an incision being made on the skin, is what some religious advocates fear may happen to humans as well in the future: “[t]he implantation site was locally anaesthetized with a procaine (2%) injection, shaved and disinfected. After making a small incision in the skin, the thermistor was implanted subcutaneously, and the incision was closed by sewing” [106].

<table>
<thead>
<tr>
<th>Table 6. Some Popular Web Sites Connecting Auto-ID and the Number of the Beast (2003-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <a href="http://www.666soon.com">http://www.666soon.com</a></td>
</tr>
<tr>
<td>• <a href="http://www.greaterthings.com">http://www.greaterthings.com</a></td>
</tr>
<tr>
<td>• <a href="http://www.countdown.com.org">http://www.countdown.com.org</a></td>
</tr>
<tr>
<td>• <a href="http://www.raidersnewsupdate.com">http://www.raidersnewsupdate.com</a></td>
</tr>
<tr>
<td>• <a href="http://www.light1998.com">http://www.light1998.com</a></td>
</tr>
<tr>
<td>• <a href="http://www.activatedministries.org">http://www.activatedministries.org</a></td>
</tr>
<tr>
<td>• <a href="http://www.idautomation.com/666mark">http://www.idautomation.com/666mark</a></td>
</tr>
<tr>
<td>• <a href="http://www.rapturechrist.com/666.htm">http://www.rapturechrist.com/666.htm</a></td>
</tr>
<tr>
<td>• <a href="http://www.av1611.org/666">http://www.av1611.org/666</a></td>
</tr>
</tbody>
</table>

Figure 4. The Comprehensive-Interpretative Model

Gematria  Arithmetic

666

Symbolic-Theol  Riddle
Religious advocates say it [i.e. transponder implants] represents ‘the mark of the Beast’, or the anti-Christ” [107]. Christians who take this mark, for whatever reason, are said to be denouncing the seal of baptism, and accepting the Antichrist in place of Christ [108], [109], [42]. Horn [110] explains:

“[m]any Christians believe that, before long, an antichrist system will appear. It will be a New World Order, under which national boundaries dissolve, and ethnic groups, ideologies, religions, and economics from around the world, orchestrate a single and dominant sovereignty… According to popular Biblical interpretation, a single personality will surface at the head of the utopian administration… With imperious decree the Antichrist will facilitate a one-world government, universal religion, and globally monitored socialism. Those who refuse his New World Order will inevitably be imprisoned or destroyed.”

There are a number of privacy concerns and religious implications- fundamentalist Christian groups regard implanting computer chips as the “Devil’s work” [111]. According to Gary Wohlscheid, the president of The Last Day Ministries, the VeriChip (the first human implantable microchip approved by the Food and Drug Administration in the United States) could well be the mark. Wohlscheid believes that out of all the auto-ID technologies with the potential to be the mark, the VeriChip is the closest. About the VeriChip he says however, “[i]t’s definitely not the final product, but it’s a step toward it. Within three to four years, people will be required to use it. Those that reject it will be put to death” [112]. These are, of course, the positions of those who have entered the debate from the so-called fundamentalist literalist perspective and represent the more vocal and visible spectrum of contemporary “apocalyptic” Christianity. In this context the description of fundamentalism seems to be a common label today, for anyone within the Christian community who questions the trajectory of technological advancement.

8. Conclusion

Ultimately, for most members of a believing religious community, this subject revolves around the most important question of individual freedom and the right to choose [113], [114]. This paper presented a variety of interpretations for the “666” conundrum. It does not claim to provide the solution to the conundrum or to its secret meaning. But rather the hope was to inform the scientific community of the serious approaches to understand this infamous number from a biblical studies perspective. It also briefly looked at the way the automatic identification trajectory is linked to the number of the beast by persons predominantly in the Christian believing community. It should also be underlined that some of the key arguments put forward by religious groups who would oppose uberveillance are shared equally by non-religious communities on ethical and civil liberty grounds. Yet the crucial point made in this paper is that reference to Revelation 13 is no longer an “unmentionable” in ICT discourse and concerns as to the trajectory of “implantables” can no longer be consigned to the conspiracy basket.

9. Author’s Note

For a thorough analysis of the background, sources and interpretation of the “number of the beast” see [115]. This Masters by Research thesis was awarded the Dean’s commendation in 1998 for a work of an exceptionally high standard. The dissertation in hardcopy is available from a number of theological libraries, including those at the universities of Oxford, Princeton, and Harvard.

Throughout where Greek is used in this paper the monotonic system has been applied (unlike in the original study).

10. Acknowledgment

The author would like to acknowledge the long term cross-disciplinary collaboration with Associate Professor Katina Michael of the same School at the University of Wollongong. A small portion of this paper was taken from a jointly authored paper published in 2004 [6].

11. References


[37] SibOr, 1:324-329.

[38] SibOr, 1:137-146.


[94] Antichr, 50.


