

COSMIC

HIDDEN MESSAGES FROM

CODES

THE EDGE OF ETERNITY

COMPREHENSIVE WORKBOOK

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MISSLER

Cosmic Codes

Comprehensive Workbook

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How to Use this Workbook

For maximum benefit, please read the following tips:

1. Before starting a *Cosmic Codes* chapter or audio session, please read through the study questions and, if part of a small group, the discussion questions that pertain to that chapter/session. Read through each chapter, then answer the corresponding questions in the workbook.
2. The PowerPoint handouts coordinate with the audio sessions in the *Cosmic Codes* series and do not follow the same sequence as the book. Pay close attention to the audio session title pages, as they list the appropriate chapters from the *Cosmic Codes* book and will enable you to find the questions that pertain to each session.
3. If you are a small group leader, please feel free to use the questions at the back of the workbook to facilitate discussion within your group. See the *Discussion Questions for Small Group Leaders* section.
4. Through arrangements with Louisiana Baptist University, we can now offer you the means to earn college course credit toward a degree up to and including the Ph.D. through our Koinonia Institute. If you are interested in obtaining college credit for this study course, you will need to follow these steps:
 - a) Go to www.khouse.org/ki to download an application packet, which includes applications to both KI and LBU (.pdf files), the link to LBU's online catalog (www.lbu.edu), plus a list of available courses through Koinonia Institute.
 - b) Fill out both applications and return to us with your \$100 registration fee, which enrolls you in both KI and LBU, and tuition of \$75 per credit. LBU will accept KI's transcripts and is the institution that will grant your degree (you will still need to take distance-learning classes through LBU to earn your degree).
 - c) This course is called Bible Cryptology and may be used to satisfy degree requirements for both undergraduate and postgraduate degrees. It is worth 3 credits = \$225 for the course.
 - d) After registration fee and tuition have been paid, finish all study questions in the main section of the workbook, as well as the additional assignments located in the *Koinonia Institute* section. These materials will be turned in, graded, and returned to the student along with a final exam. Once the final has been returned and graded, you will be notified of your grade in the course. For more information on procedures, see the information page at the front of the *Koinonia Institute* section of this workbook.

4) What are the four basic types of substitution ciphers?

5) What type of polyalphabetic cipher was considered unbreakable for over four centuries? What two basic tools does it deny the cryptanalyst?

6) What polyalphabetic cipher is the only truly unbreakable cipher? What are its three essential requirements?

Cosmic Codes: Chapter 2

(session 1 in audio series)

Chapter 2: Paracryptology—Codes From Other Worlds (from CC book)

1) How were Egyptian Hieroglyphics ultimately deciphered?

2) How was cuneiform writing ultimately deciphered?

3) What was the Ozma Project and what was concluded from its results?

Cosmic Codes: Chapter 3

(session 1 in audio series)

Chapter 3: Basic Discoveries (from Cosmic Codes book)

- 1) If the sum of the angles in a triangle is more than 180° , what does that imply? Why?

- 2) What are “hyperspaces”? What does Riemann’s Metric Tensors have to do with them? How do they impact our perspectives of Biblical topics? How many dimensions are currently considered to be involved in our “reality”? What Biblical reference lists four of them?

Cosmic Codes: Chapter 4

(session 1 in audio series)

Chapter 4: The First Cryptanalyst (from Cosmic Codes book)

- 1) Why was the ancient city of Babylon considered impregnable? How did Cyrus' troops capture it?

- 2) In what way was the method of capture significant from a Biblical point of view? Discuss the distinctions of: a) The Fall of Babylon in 539 BC; and b) The Doom of Babylon in Isaiah and Jeremiah.

3) Why was the fabled “handwriting on the wall” unintelligible to the experts present at the banquet?

4) What is the significance of the letter to Cyrus in the Book of Isaiah?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

The next section explores some Basic Discoveries. Read Chapter 5, “A Hidden Message.” Also, read Genesis Chapter 5.

Cosmic Codes: Chapter 5

(session 3 in audio series)

Chapter 5: A Hidden Message (from Cosmic Codes book)

1) List the reasons that Enoch is distinctive in the Bible.

2) In what way was Methuselah himself a prophecy?

3) List the 10 names listed in Genesis 5, with their implied meanings. (Include the *basis*, where known, for each.)

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 6, "Hidden Acrostics." Read the Book of Esther.

Cosmic Codes: Chapter 6

(session 3 in audio series)

Chapter 6: Hidden Acrostics (from Cosmic Codes book)

1) What is an “acrostic”?

2) What does *Tenakh* signify?

3) What is Zipf’s Law? What is its alternative designation and why? Give an example of its practical use.

4) List the 8 times that the name of God is hidden in the Book of Esther, and compare their differences.

5) Explain Pontius Pilate's use of an acrostic.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 7, "The Magic of Sevens." Also explore Appendices D and F.

Cosmic Codes: Chapter 7

(session 3 in audio series)

Chapter 7: The Magic of Sevens

1) What was Dr. Ivan Panin famous for?

2) What are the alternative implications of the heptadic structures underlying the genealogy in Matthew 1?

3) What is *gematria*?

- 4) Why could the last 12 verses of Mark *not* have been “added later” by some well-intentioned scribe?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

The next section is on Microcodes. Read Chapter 8, “The Hebrew Alphabet.” If you haven’t seen the movie, *Contact*, check it out.

Cosmic Codes: Chapter 8

(session 4 in audio series)

Chapter 8: The Hebrew Alphabet (from Cosmic Codes book)

1) What is a *jot* (“yot”) and a *tittle*?

2) List some of the requirements for a language intended to be used for *extraterrestrial* communication.

3) What role does *redundancy* play in the use of language? What offsetting benefit does it offer for the bandwidth it requires?

4) What role do *vowels* play? How does Hebrew manage without them?

5) What is “noise”? What is meant by “signal-to-noise ratio”?

6) What is the *Shu Ching* and its significance?

7) Who was *Shang Ti* and how is this Biblically significant?

8) What can we infer, regarding the Book of Genesis, from some of characters of the Sinitic languages?

9) How do the ideographs of Hebrew contrast with the pictographs of Ch'in characters?

10) How do the Hebrew characters on the Moabite Stone differ from the Hebrew characters today?
How are they useful to the modern student?

11) Explain the underlying significance of the Hebrew *heh* can have, with examples.

12) In what ways is the *aleph* and the *tau* used by Jesus Christ in the Old Testament?

13) What are the *alternative* uses of the *aleph-tau* in the Hebrew text? What is *maqeph* and when is it used?

14) What is a *hypocatastasis*? Give some examples of its use.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 9, "Assassination Predicted?" Optional: review *Israel: The Blessing or the Curse*, by Bill Koenig and John McTernan.

Cosmic Codes: Chapter 9

(session 4 in audio series)

Chapter 9: An Assassination Predicted? (from Cosmic Codes book)

1) What is *scripta continua*? How was ancient Hebrew *parsed*?

2) List the reasons some have applied Genesis 15:17 to the assassination of Prime Minister Itzhak Rabin.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 10, “The Skipping of Letters,” and Appendix H, “The Hidden Genealogy in Genesis 38.”

Cosmic Codes: Chapter 10

(session 2 in audio series)

Chapter 10: The Skipping of Letters (from Cosmic Codes book)

- 1) What are the discrepancies between the three *Torahs*: Ashkenazi, Sephardi and Yemenite? How are they significant?

- 2) How did the persecution of Jewish mystics in the 12th century impact the development of cryptology?

- 3) Who was Nachmonides and what were some of his convictions?

4) Who was Vilna Gaon and what were some of his convictions?

5) Who was Weissmandl and what were his “rediscoveries”?

6) Explain the ostensible design implied by the occurrence of letters *T, o, r,* and *h* in the five books of Moses. Was this deliberate or accidental? Why?

7) Explain how David's genealogy is found in Genesis 38.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Now we get to the controversial codes in Section IV: "The Equidistant Letter Sequences." Read Chapter 11, "The Torah Codes."

Cosmic Codes: Chapter 11

(session 2 in audio series)

Chapter 11: The Torah Codes (from Cosmic Codes book)

- 1) How are the occurrences of "Israel" in Genesis at letter intervals of 7 and 50 significant? What makes the clustering behind Genesis 1:31 – 2:3 significant?

- 2) How are the seven edible species of seed-bearing fruit and the 25 trees encrypted in Genesis 1:29 – 2:9 significant? How is their clustering behind this text significant?

- 3) Why were the articles by Rips, Witstum, and Rosenberg in the *Journal of the Royal Statistical Society* and the refereed journal, *Statistical Science* so significant?

7) What are the main criticisms of the skeptics and how are they rebutted?

8) What characteristics—beyond simply the statistical occurrences—appear to validate the codes?

9) Where is *divination* prohibited in the Bible and how do the occurrences of prophetic codes relate to this prohibition?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 12, “The Yeshua Codes.” Of all the names that would be most expected by Christians—and most denied by Talmudic Judaism—the name of *Yeshua* would prove to be most controversial of all.

Cosmic Codes: Chapter 12

(session 2 in audio series)

Chapter 12: The Yeshua Codes (from Cosmic Codes book)

1) How is a frequency table relevant to cryptographic analysis?

2) Name two Scripture references that encourage the search for “*Yeshua*” in the Biblical text.

3) How is *clustering* relevant to candidate ELSs?

4) Which text is known as “the Holy of Holies of the Old Testament”? Why?

5) What implications did the discovery of the Dead Sea Scrolls have on our appreciation of the text of Isaiah?

6) How many relevant names are encrypted behind the text of Isaiah 53? Why are they relevant?

7) Why is the name of James recorded only twice, although there are three that are prominent in the New Testament?

8) What name, although composed of high frequency letters, is conspicuous by its *absence* of occurrence in the text of Isaiah 53?

9) What is instructive about Ernest Wright's novel *Gadsby*?

10) If the ELS codes are a highly vulnerable form of encryption, and divination is prohibited in the Scripture, of what use are they? Explain your answer.

- 11) Explain the apologetic implications of Type I and Type II errors (after Neyman and Pearson) in testing a hypothesis.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 13, “The Dark Side” of the codes.

Cosmic Codes: Chapter 13

(session 2 in audio series)

Chapter 13: The Dark Side (from Cosmic Codes book)

- 1) What is the significance of the ELS “codes”? Explain the potential role of authentication.

- 2) What are the dangers?

- 3) List the prohibitions of divination and the occult in the Scripture. How do these injunctions impact ELSs?

4) What was Sir Isaac Newton's resolution of the value of prophetic interpretations?

5) What is mysticism? Contrast: a) metaphysics b) cosmology c) theosophies d) occultism e) theurgy f) magic g) Kabbalah h) Gnosticism.

6) How did Jewish thought subsequently respond to the destruction of the Temple and their forced abandonment of blood sacrifices required by the *Torah*? How does Talmudic Judaism differ from Mosaic Judaism?

7) In what ways does the Kabbalah differ from Talmudic Judaism? In what way does the Kabbalah endorse views contrary to the Biblical text?

8) Summarize your evaluation of the ELSs. Are they real? If so, how are they of value?

7) Give examples of paradox resolution tools and their practical application.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Going “up a level,” we will now review a more comprehensive sphere of “encryption,” ones that *had* to originate outside the dimension of time itself: Section V, “Macrocodes: The Strategic Structure.” Read Chapter 14, “The Use of Macrocodes.”

Cosmic Codes: Chapter 14

(session 5 in audio series)

Chapter 14: The Use of Macrocodes (from Cosmic Codes book)

- 1) Define the following terms: a) sememes b) syntax c) semantics d) phonemes e) microcodes f) macrocodes.

- 2) What purposes can macrocodes achieve?

3) Explain the differences between: a) similes b) metaphors c) analogies d) allegories e) types, prototypes, and antitypes f) parables.

4) How many different kinds of rhetorical devices (“figures of speech”) are found in the Biblical text?

5) List the prophetic (typological) features in Genesis 22, the *Akedah*.

6) How do we know that the crucifixion occurred on the north side (rather than on the Mount of Olives as some believe)?

7) List the prophetic (typological) features in Genesis 24.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 15, “Cosmic Macrocodes.”

Cosmic Codes: Chapter 15

(session 5 in audio series)

Chapter 15: Cosmic Macrocodes (from Cosmic Codes book)

1) How big is our galaxy?

2) In what ways does it seem that it was designed *for us*? (Explain the “Anthropic Principle.”)

3) Describe or define: a) The Zodiac b) The *Mazzeroth* c) The ecliptic d) A constellation e) Decans

4) What are the distinctions between astronomy and astrology?

5) Genesis 1:14 indicates that the stars were made for “signs.” Which characteristics of a constellation reveal the story or significance associated with it?

6) List the names of stars of the constellation Virgo in the order of their brightness and summarize the concepts associated with it.

7) Explain the blood curse on the line of Jeconiah and how it was avoided by the Messiah.

8) In what way do the claims of Christ depend upon the special exception given to the daughters of Zelophehad?

9) What were the tribal standards for the lead tribes in each of the four “camps” of Israel? How do they exemplify the four Gospels?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 16, "Measuring Confidence."

Cosmic Codes: Chapter 16

(session 5 in audio series)

Chapter 16: Measuring Confidence (from Cosmic Codes book)

1) What was Lord Kelvin's classic comment about measurement?

2) Explain Type I and Type II errors in the validation of a hypothesis.

3) What did Peter mean when he said we have "the more sure word of prophecy"?

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- 4) In the sample of eight prophecies, list them and apply your own *a priori* estimates and calculate the result. Are your estimates more or less confident than ours?
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- 5) As we added additional prophecies to our sample, we assumed that there would be no decrease in likelihoods. Why is this a significant error? What effect does it have on our analysis?
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Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 17, “The 70 Sevens” and Daniel Chapter 9. (Also, review the briefing package, *The Seventy Weeks of Daniel*, or the equivalent material in our *Expositional Commentary on the Book of Daniel*.)

Cosmic Codes: Chapter 17

(session 6 in audio series)

Chapter 17: The 70 Weeks [Note: You may need to supplement your basic text with our Expository Commentary notes for this session.]

- 1) What is the primary “key” which triggers the events profiled by Jesus in His confidential briefing to His disciples in Matthew 24?

- 2) How is the LXX (Septuagint) translation significant in regards to Daniel 9?

- 3) To whom, specifically, is Gabriel’s prophecy addressed?

- 4) Explain each of the six major milestones in Daniel 9:24, and summarize the events in each of the subsequent three verses.

5) What evidence is there that the “weeks” are regarded as weeks of *years*?

6) Why do we regard the years as composed of 360 days?

- 7) Explain the trigger (*terminus ad quo*) that begins the events of verse 25. (List four candidate decrees and explain which one correctly fits the specifications.)

- 8) When did Jesus present Himself as the *Meshiach Nagid*? What was the date on the Jewish calendar? (Justify the year.)

- 9) What else was going on this day in the Temple? What relation did this have to the events later in the week?

10) Why were the Pharisees upset during the Triumphal Entry in Luke 19? How does Psalm 118 relate to this event?

11) How many days elapsed between the *terminus ad quo* and the *terminus ad quem* in verse 25? How accurately did history fulfill Gabriel's prophecy? (Explain and detail.)

12) List at least two places where Jesus held the leadership accountable to know that the fulfillment of prophecy was imminent.

13) When was “national blindness” decreed upon Israel? How long will it last? What event will indicate its conclusion?

14) Why was Jerusalem destroyed in 70 AD? (Give references justifying your answer.)

15) What, precisely, was the “abomination of desolation”? How do we know?

16) Did an "Abomination of Desolation" occur in 70 AD? Has it happened since?

17) Detail the events in the apparent interval between Daniel 9:25 and 9:27. Where else is this interval implied in the Scriptures?

18) What defines the "70th Week" in Daniel 9:27? Explain the events the "70th Week": Who is "the Prince that shall come"? Who are "the many"? What event divides the "week" in half? What event concludes the "week"?

19) List the various ways, with references, that each half of this “70th week” is alluded to.

20) How do we know that the Temple is destined to be rebuilt?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 18, “The Once and Future Calendar.” Supplemental material is in our briefing package, “*The Feasts of Israel*.”

Cosmic Codes: Chapter 18

(session 6 in audio series)

Chapter 18: The Once and Future Calendar (from Cosmic Codes book)

- 1) List the 70 “appointed times” of Israel. In what way were they *anticipated* in the text of Genesis 1:14?

- 2) Why do the Jews have *two* calendars and how do they differ?

- 3) What is the Levitical significance of leaven and why? List both the Old and New Testament usages of this idiom.

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- 4) Explain the historical and prophetic significance of each of the three spring feasts of Israel. Detail the ways that Jesus Christ was the fulfillment of each of them.
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- 5) Explain the historical and possible prophetic significance of the three fall feasts of Israel.
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- 6) What makes the Feast of Shavuot distinctive from all the others? What are the historical and prophetic possibilities of this feast?
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7) Why was duration of the Babylonian Captivity precisely 70 years? (Justify your answer with the reference.)

8) In what way is the Jubilee Year relevant *prophetically*?

9) Where is the observation of Hanukkah mentioned in the New Testament and why?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 19, “The Apocalypse Codes.”

Cosmic Codes: Chapter 19

(session 4 in audio series)

Chapter 19: The Apocalypse Codes (from Cosmic Codes book)

1) To whom was “The Revelation” given, and by whom, and why?

2) In the 404 verses of the book, how many allusions are included from the rest of the Bible?

3) Make a list of the “seven” found in the Book of Revelation.

4) Where, in the Book of Revelation, is the *outline* of the entire book?

5) Make a list of the things that were begun in Genesis that are completed in Revelation.

6) Make a chart of the Seven Letters to Seven Churches showing their heptadic structure.

7) What are the four levels of meaning evident in the seven letters (with examples for each)?

10) What do the 24 Elders represent and how do we know?

11) Summarize the evidences that the church is in heaven after Revelation 4:1.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 20, “On the Fringe: Numerics and Gematria,” Appendix G, “The Mathematics of Beauty,” and Appendix I, “The Universal Constants, δ and e .”

Cosmic Codes: Chapter 20

(session 4 in audio series)

Chapter 20: On the Fringe—Numerics & Gematria (from Cosmic Codes book)

1) Explain and distinguish the terms: a) Numerology b) Numerics c) Gematria

2) Why are there 60 minutes to the hour? 360 degrees in a circle?

3) Why is it easier to do long division with Arabic decimals than with Roman numerals?

4) Name *two* places that the value of δ can be determined from the Bible. What do each of these demonstrate about the quality of the text?

5) What is the base of Napierian logarithms, why are they important, and where can its value be found in the Bible?

6) Which two languages assign numerical values to the letters of their alphabet?

7) Summarize the ostensible typological significance, if any, of the numbers from 1 to 12, and give examples.

- 8) What is the Fibonacci sequence and what makes it significant? Give examples from throughout the created universe and its implications.

- 9) Give examples of the hazards of numerical mysticism which have led people astray. How should these be guarded against?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

We now enter Section VI: *Metacodes: Beyond Our Horizon*. Read Chapter 21, “Advanced Design Considerations.”

Cosmic Codes: Chapter 21

(session 8 in audio series)

Chapter 21: Advanced Design Considerations (from Cosmic Codes book)

- 1) Explain the distinctions between *analog* data and *digital* data. What the advantages of, and requirements for, digital communication?

- 2) Explain a) Error detecting codes b) Error correcting codes c) Adaptive coding d) Authentication of the sender.

- 3) How were the equivalent of parity checks and checksums used by the Hebrew scribes to assure the quality of their transcriptions?

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- 4) How is a message prepared if one anticipates a) Noise? b) Hostile jamming? c) Counterfeits? Are there examples of these in the Bible?
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- 5) In what ways is the Bible similar to a hologram?
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Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 22, "The Code of Life."

Cosmic Codes: Chapter 22

(session 8 in audio series)

Chapter 22: The Code of Life (from Cosmic Codes book)

- 1) Explain why the design of the computer *language* must precede the design of the hardware to process it.

- 2) Explain the principle of “irreducible complexity” and how destroys the notions of spontaneous biogenesis.

- 3) Explain why a system dependent upon multiple subsystems cannot “evolve” on its own without a master designer?

4) Explain why the theory of evolution would violate the entropy laws.

5) Why do mutations always involve a *loss* of information?

6) Explain the *mechanical* problems involved in unwinding, copying, and rewinding the master DNA, and the speeds at which occurs.

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read Chapter 23, "Our Digital Universe."

Cosmic Codes: Chapter 23

(session 7 in audio series)

Chapter 23: Our Digital Universe (from Cosmic Codes book)

1) What two concepts in mathematics are *not* found in the physical universe?

2) What are the cosmological labels for the beginning and the end of our finite universe?

3) What is *quantum physics* and how does it differ from classical Newtonian physics?

4) Explain the property of *nonlocality* in quantum physics.

5) If the act observation of a particle actually helps create its properties, what does that imply about the future of science?

6) Explain the Einstein-Podolsky-Rosen paradox.

7) Explain how the Bell Inequality led to experimental verification of *nonlocality*. How does this impact our own concepts of Biblical reality?

8) Explain the difference between deterministic and stochastic processes, and how the tools to study them differ.

9) What is the “mathematics of chaos” and how does it affect our perceptions of Biblical reality?

10) What were the original significations of “*erev*” and “*boker*” that later led to their use for “evening” and “morning”? Why was there no “*erev*” and “*boker*” on the seventh day of Genesis 1?

11) What Biblical reference leads to the conjecture that the entropy laws were a result of the Fall of Man in Genesis 3?

12) What are the implications of the realization that the velocity of light is *not* a constant and has been slowing down?

13) What are the implications of the discovery that the red shift in the spectra of stars is *quantized*?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

We now wrap up with Section VII: *Treasure Hunting On Your Own*. Read Chapter 24, “Your Personal Adventure.”

Cosmic Codes: Chapter 24

(not in audio series)

Chapter 24: Your Personal Adventure (from Cosmic Codes book)

1) In what ways is personal Bible study *not* a “spectator sport”?

2) What are the seven considerations usually emphasized in classical *hermeneutics*?

3) Give examples in the Scripture where enslavement to “context” would have been a blindfold to truth.

4) How does *hermeneutics* differ from *epistemology*?

5) Explain the distinction between *inductive* and *deductive* reasoning and their proper application.

6) What is “expositional constancy” and give examples.

7) What is the “law of first mention” and give examples.

8) How do the structures underlying the text authenticate the last 12 verses of Mark? Are these legitimate hermeneutical or epistemological tools?

9) Explain why these fallacies arose, why they are falsehoods and how they can be refuted: a) The “Documentary Hypothesis” b) The “Deutero-Isaiah Hypothesis c) Amillennialism d) The Ten Lost Tribes

10) How do the structures underlying the text authenticate the last 12 verses of Mark? Are these legitimate hermeneutical or epistemological tools?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Read the final chapter, "The Ultimate Code: You."

Cosmic Codes: Chapter 25

(session 8 in audio series)

Chapter 25: The Ultimate Code—You (from Cosmic Codes book)

1) In what way did the movie, *Jurassic Park*, suggest technology of the resurrection?

2) In what ways is man made “from the dust of the earth”?

3) In what sense is the “real you” *software* rather than “hardware”? What are the implications of being free from the restrictions of mass?

4) What are the evidences that we actually exist in more than four dimensions? What are the implications?

5) How do we know that the Bible is of *extraterrestrial* origin?

6) When did God first begin dealing with *you*? (give references)

7) If you were on trial for "being a Christian," is there enough evidence available to convict you?

8) If the commandment, “Thou shalt not take the name of the Lord in vain,” has more to do with *ambassadorship*, rather than “vocabulary,” what are *you* going to do about it?

9) What is the most serious threat to *your* continuing spiritual growth? How are you going to deal with it?

Group Discussion Questions: See *Small Group Leaders* section of this workbook.

Preparation for the Next Session:

Pray seriously for His counsel for *your next step*. Good hunting! What God starts He finishes!

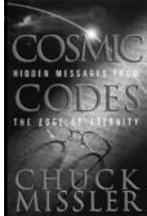
Cosmic Codes
Audio Session 1 Handouts

Questions from
Cosmic Codes book
Chapters 1-4

Session 1:

Secret Writing

Introduction to Cryptography



Hidden Messages
in the Bible?

Codes in Literature

- Edgar Allan Poe, *The Gold Bug*
- Arthur Conan Doyle, *The Adventure of the Dancing Men*
- Carl Sagan, *Contact*

The Codes of War

- Germany's *Enigma*: from Alberti's cipher disks and Cardano's Autokey
- *Black*, the American code
 - October 23, 1942: El Alamein
- *Project Ultra*: Turing & Von Neumann
- *Magic* victory over Japan's *Purple*
 - Day and hour of Pearl Harbor...

Are there “Hidden Messages” in the Bible?

*It is the glory of God to conceal a thing:
but it is the honor of kings to search out a matter.*

Proverbs 25:2

Methods of Concealment

- Steganography
- Cryptography
 - Codes
 - Ciphers
 - Transposition
 - Substitution

Transposition Ciphers

- Skytale



- Railfence Cipher
- Columnar Transpositions

Railfence Cipher

Plaintext: PLEASE HELP NOW

P H N
L E E E O
 E S L M W
 A P

Ciphertext: PHNLEEEEOESLMWAP

Columnar Transposition

Plaintext: CINDERELLA BE HOME BEFORE MIDNIGHT

123456

C	I	N	D	E	R
E	L	L	A	B	E
H	O	M	E	B	E
F	O	R	E	M	I
D	N	I	G	H	T

Keyword: "DARKLY"

ADKLRY

214536

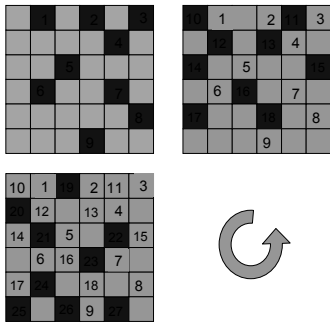
Ciphertext: ILOON CEHFD DAEEG EBBMH NLMRI REEIT

Cardano Grille

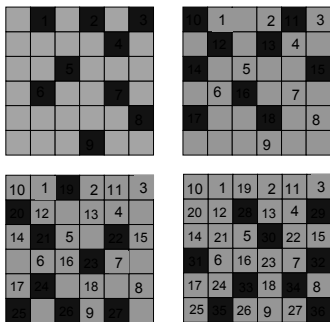
F		L	E	E	A		T
O	N		C	E		A	L
L	I	S		D	I		S
	O	V	E	R		E	D

FLEE AT ONCE ALL IS DISCOVERED

The Turning Grille



The Turning Grille



Equidistant Letter Sequences

- The *Equidistant Letter Sequences* is simply a Cardano Grille with the simplest possible formula
 - A fixed linear sequence of skipped letters
- Not that useful for secrecy, they can be used to *authenticate* a Source.

Substitution Ciphers

- Monoalphabets
 - Caesar
 - One-on-one Mapping
- Polyalphabetic
- Polygraphic
- Block Substitution (and Fractionating)

Caesar Cipher

Plaintext: THIS IS A FASCINATING SESSION.

Ciphertext: WKLVL VDIDV FLQDW LQJVH VVLRQ

One-on-one Mapping

plaintext letters/ciphertext letters:

a b c d e f g h i j k l m
B Q A C S R D T O F V M H

n o p q r s t u v w x y z
W I J X G K Y U N Z E P L

enemy = SWSHP RIS = foe

Polyalphabetic Ciphers

- Leon Battista Alberti (1404-1472): *Vigenère Polyalphabetic Ciphers*
- Caesar Ciphers, with variable rotation
- (*Porta* and *Beaufort* variations)

Vigenère Tables

Keyword: DOG
 Plaintext: JIM
 Ciphertext: M

		Key Letter																									
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Plaintext	A	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	B	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A
	C	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B
	D	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C
	E	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D
	F	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E
	G	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F
	H	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G
	I	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H
	J	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I
	K	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J
	L	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K
	M	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L
	N	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M
	O	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	P	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Q	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	R	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	S	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R

Vigenère Tables

Keyword: DOG
 Plaintext: JIM
 Ciphertext: M

		Key Letter																									
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Plaintext	A	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	B	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A
	C	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B
	D	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C
	E	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D
	F	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E
	G	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F
	H	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G
	I	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H
	J	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I
	K	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J
	L	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K
	M	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L
	N	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M
	O	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	P	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Q	Q	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	R	R	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	S	S	T	U	V	W	X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R

Polygraphic Ciphers

- Two or more letters operate together
- Undercuts monographic frequency analysis
 - Obliterates single letter characteristics
 - It halves the numbers of elements available for frequency analysis
 - The number of available digraphs are greater than the number of letters

Substitution Ciphers

- Monoalphabets
 - Caesar
 - One-on-one Mapping
- Polyalphabetic
 - Autokey
- Polygraphic
 - Playfair Code
- Block Substitution (and Fractionating)

NBS DES

- National Bureau of Standards' Data Encryption Standard
 - 64-bit key controls:
 - 17 stages of polyalphabetic substitutions, each alternated with 16 transpositions.
- Exhaustive search of all 2^{64} keys

Advanced Topics

- Fractionating Schemes
 - Bifid
 - Trifid
- One-Way Keys (Public Keys)
 - PGP

Cipher Devices

- Alberti's Cipher Disk
- Wheatstone Disk
- Thomas Jefferson's Wheels
- Babbage's *Difference Engine*
- *Enigma* machines in WWII
- Turing/Von Neumann Machines
- Modern Computers
 - Double every 18 months;
 - Laptop w/Pentium III:
 - 1 of 500 world fastest, 1995



The Ellipsis Closes

- The Kabbalist's textual traditions
- The Cryptology of the Renaissance
- The Development of Mechanical Aids
- The *Enigma* Machines
- Wartime Computer Development
- The (Re)Discovery of the codes

Paracryptology

- Rosetta Stone
 - Heiroglyphics, Demotic, Greek
- Jean-François Champollion
 - Egyptian Hieroglyphics
- Henry C. Rawlinson, Cliff of Behistun:
 - Babylonian,
 - Old Persian
 - Elamite

Extraterrestrial Communication

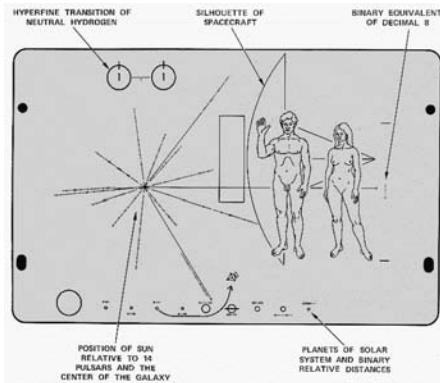


- Project Ozma
- CETI: National Academy of Sciences, Byukratan, Russia
- SETI: 37 intercepts

Extraterrestrial Languages

- Descartes, Leibnitz, Dalgarno, Giuseppe Peano, et al.
- N. D. Andreyev, Leningrad Academy of Sciences: statistical techniques
- Jean-François Sudre: a seven note/seven color scheme
- Alfred North Whitehead and Bertrand Russell: *Principia Mathematica* foundations of mathematics and logic to be identical.
- Dr. Hans Freudenthal, professor of mathematics, University of Utrecht in the Netherlands: "Lincos" from *lingua cosmica*.
- Lancelot Hogben, Fellow of the Royal Society: *Astraglossa*.

Plaque on Pioneer X



Extraterrestrial Language

- How would you recognize one?
- Characteristics
 - Phonetic, Pictorial, or Conceptual?
 - Self-Parsing
 - Use of Redundancy vs. Bandwidth?

Communication Redundancy

A sed iend rough eath ease ain.
 A sed iend rough eath ease ain.

- English is about 75% redundant.
- Redundancy improves signal/noise ratios.
- Cryptanalysis depends upon redundancy.
- Vowels are generally redundant.

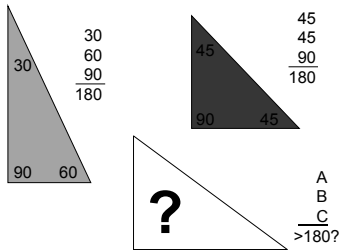
Communication Redundancy

A blessed friend brought breath and ease again.

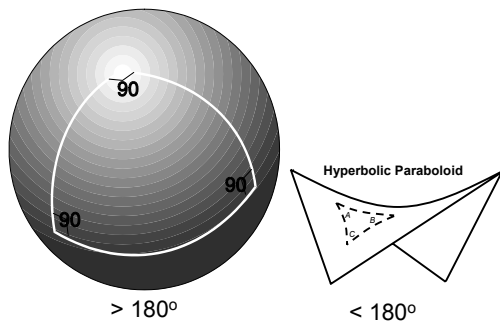
A cursed fiend wrought death disease and pain.

- English is about 75% redundant.
- Redundancy improves signal/noise ratios.
- Cryptanalysis depends upon redundancy.
- Vowels are generally redundant.

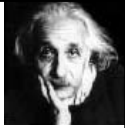
Trigonometry



Spherical (3-D) Trigonometry



Einstein's Revolution



Special Relativity (1905)

- Length, mass, velocity and time are *relative* to velocity of the observers

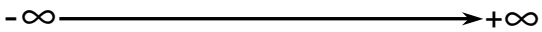
General Relativity (1915)

- No distinction between time & space
= a 4-dimensional continuum
(Confirmed 14 ways to 19 decimals)

Linear Time?



Eternity?



The Nature of God

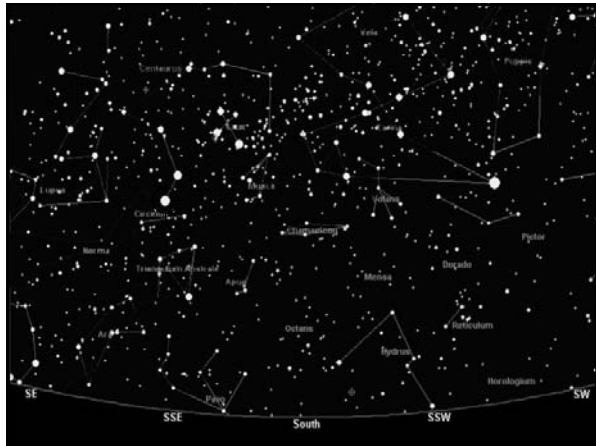
- Is God subject to the restrictions of
 - Mass?
 - Acceleration?
 - Gravity?
- He is not simply One with “lots of time”
 - He is *outside* of the restrictions of time
 - This uniqueness is His Personal Imprint...

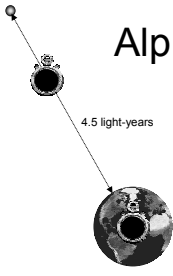
Time is *not* uniform

- Time is a *physical* property
- Time *varies* with
 - Mass
 - Acceleration
 - Gravity
 - ...among other things...
- We exist in *more* than 3 dimensions
 - Apparently, 10...

Other Demonstrations

- Aircraft experiment (1971)
 - Eastward : *lost* 0.059 microseconds
 - Westward: *gained* 0.273 microseconds
- Twin Astronauts (hypothetical)
 - Alpha Centauri trip...





Alpha Centauri Trip

If $v = 50\%$ of c :

$T_e = 18$ years

$T_s = T_e \sqrt{1 - v^2/c^2}$

$T_s = 15$ years, 7 months

2 years, 5 months younger than his twin brother!

“People like us, who believe in physics, know that the distinction between the past, the present, and the future, is only a stubbornly persistent illusion.”

Albert Einstein

Two Critical Discoveries

- 1) We have in our possession
an *Integrated Message System*
 - 66 separate books
 - Penned by 40 different individuals
 - Over thousands of years*...in which every detail is anticipated by deliberate, skillful, design!*
- 2) And which demonstrates that its origin is from *outside our time domain*.

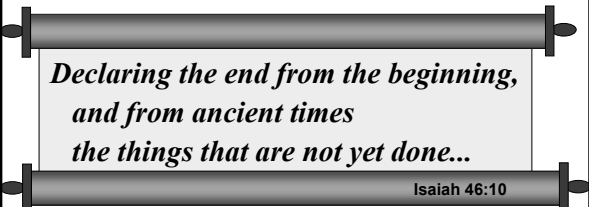
From Outside Time



*For thus saith the High and Lofty
One, that inhabiteth eternity...*

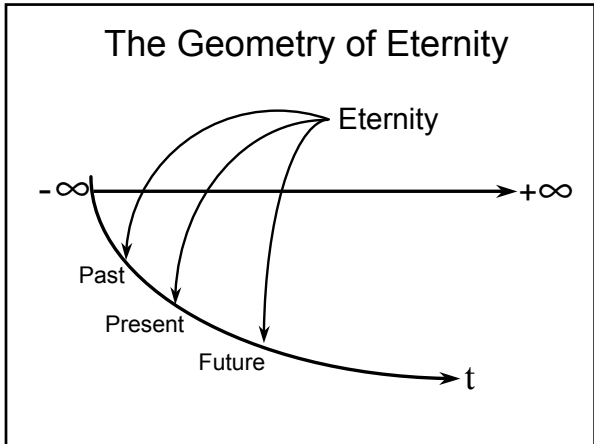
Isaiah 57:15

Authentication



*Declaring the end from the beginning,
and from ancient times
the things that are not yet done...*

Isaiah 46:10



Are there “Hidden Messages” in the Bible?

*It is the glory of God to conceal a thing:
but it is the honor of kings to search out a matter.*

Proverbs 25:2

Albam

כ י ט ח ז ו ה ד נ ב א

→ ת ש ר ק צ פ ע ס נ מ ל

Isaiah 7:6: *Tabeal*, טבאל = רמלך, *Remala*

Atbash

כ י ט ח ז ו ה ד ג ב א
←
ל מ נ ס ע פ צ ק ר ש ת

Jeremiah 25:26 & 51:41:

שֶׁשְׁחָד, *Sheshach* = בָּבֶל, *Babel*

Jeremiah 51:1:

לֵב קָמִי, *leb kamai* = כַּשְׁדִּים, *Kashdim*
"heart of my enemy" "Chaldeans"

The Fall of Babylon

יִטַּח יִטַּח אֶדְכָּ וְגַח
מִנָּא מִנָּא תְקַל פֶּרֶס

M^{en}: numbered, reckoned.

"God hath numbered thy kingdom and finished it."

Your number is up.

T^{ki}: weighed.

"Thou art weighed in the balances, and art found wanting."

P^{er}s: broken, divided.

"Thy kingdom is divided, and given to the Medes and the Persians."

(**P^{er}s** is also the word for Persians.)

What about the "Bible Codes?"

- Specifically, the *Equidistant Letter Sequences* ("ELS")?
- Much fanciful and contrived has been popularized in recent books:
 - Too bizarre to be accepted;
 - Too impressive to be ignored.
- Professional competence in cryptology is essential to adequately evaluate them.

Cosmic Codes
Audio Session 2 Handouts

Questions from
Cosmic Codes book
Chapters 10-13

Session 2:

Are there "Hidden Messages" in the Bible?

*The secrets of the Torah are revealed ...
in the skipping of the letters.*

Rabbi Moses Cordevaro, 16th century

20

Genesis

בראשית בקרא אלהים את השמים ואת הארץ:
והארץ תהיה תהו ובהו וחשך עליפני תהום ורוח אלהים מרחפת עליפני
המים: ויאמר אלהים יהי אור ויהי אור: ויהי ערב ויהי בקרא אלהים את האור ויבין החשך:
ויקרא אלהים לאור יום ולחשך קרא לילה ויהי ערב ויהי בקרא יום אחד: וַ

תורה = TORH

Exodus

ואלה שמות בני ישראל הבאים מצרימה את יעקב איש וביתו באו:
ראובן שמעון לוי יהודה:
יששכר זבולון בנימין:
דן נפתלי גד אשר:
ויהי כל נפש יצא ירה יעקב שבעים נפש ויוסף הנה במצרים:
נמת יוסף וכל אחיו ושל הדור ההוא:
תורה = TORH

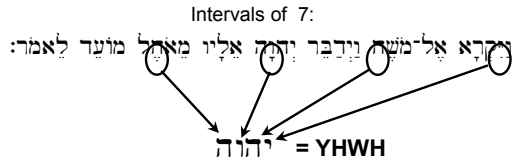
Numbers

ונדבר יהנה אלימשה במדבר סיני באהל מועד באחד לחדש השני בשנה
השנית לצאתם מארץ מצרים לאמר:
שאו אתראש כל ישרת בני ישראל למשפחתם לבית אבתם במספר שנות
כל יזקר לגלגלתם:
מפן עשרים שנה ומעלה כלי יצא סכא בישראל תפקרו אתם לצבאתם אחת
ואתרון:
הרות = HROT

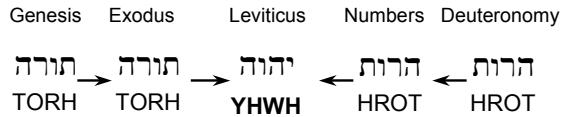
Deuteronomy

בעבר התרנן בארץ מואב הואיל משה באר את תעורת הזאת לאמר:
יהנה אליהנו דבר אלינו בחרב לאמר רבילכם טבת ביה יהנה:
פנו וסעו לקם ובאו הר האמרי ואל כל שכנו בערבה קהר ובשפלה ומגנב
ובחוף הים תפגעני ותלקטון עדי תגהר תחיל גהר פרת:
ראה נמתו לפניכם את הארץ באו וקשו את הארץ אשר נשבע יהנה
לאבתים לאבתים ליעקב לחת לקם ויועקב ואתריהם:
הרות = HROT

Leviticus



The Torah Always Points to YHWH



The Ellipsis Closes

- The Kabbalist's textual traditions
- The Cryptology of the Renaissance
- The Development of Mechanical Aids
- The *Enigma* Machines
- Wartime Computer Development
- The (Re)Discovery of the codes

Israel: **ישראל**

- 1st 10,000 letters of Genesis, -100 to +100:

–only twice: intervals of 7 and 50

–*Kiddush*, The Sabbath observance

Genesis 1:31 - 2:3

– Jubilee Year, after 7 *Shmitas*

Leviticus 25, 27

Trees in Genesis 2

אשל	Tamarisk (2)	רמון	Pomegranate (8)
אלה	Terebinth, (-2)	גפר	Gopherwood or fir (8)
עבת	Thicket (or Dense forest) (-3)	סנה	Thornbush [<i>Crataegus</i>] (9)
הדר	Citron (-3)	זית	Olive (-9)
שטה	Acacia (-3)	בטן	Pistachio Nut (13)
שקד	Almond (5)	לין	Hazel (-13)
חטה	Wheat (5)	תאנה	Fig (14)
תמר	Date Palm(5)	ערבה	Willow (-15)
ארז	Cedar (-5)	אלון	Oak (17)
אהלים	Aloe (6)	נפן	Vine (-18)
ענב	Grape (-6)	שערה	Barley (-28)
אטד	Boxthorn or Bramble (7)	ערמו	Chestnut (44)
קרה	Cassia (7)	לבנה	Poplar (-85)

The Torah Codes

- Doron Witztum, Eliyahu Rips, Yoav Rosenberg
"Equidistant Letter Sequences in the Book of Genesis", *Statistical Science*, The Institute of Mathematical Statistics, August, 1994

- 34 most prominent Rabbis
 – Names, date of birth, death

• 32 more!

• All verified

• Chance of all 66? 1:2.5 Billion!

Holocaust Codes

Name	Interval	Begins at:	
Hitler	הישלר	22	Deut 10:17
Auschwitz	אושוויץ	-13	Deut 10:21
Holocaust	שוואה	13	Deut 10:20
The Holocaust Crematorium	השוואה	50	Deut 31:16
For my sons	כבשן לבני	134	Deut 31:28
In Poland	בפולין	-107	Deut 32:22
Plagues	מנפות	-134	Deut 32:32
The Fuhrer	הפיהרר	5	Deut 32:50
Eichmann	אייכמן	9670	Deut 32:52
King of the Nazis	מלך נאציים	-246	Deut 33:16
Genocide	רצח עם	-22	Deut 33:21
Auschwitz	אושוויץ	-536	Deut 33:24
Germany	גרמניה	-933	Deut 33:28
Hitler	הישלר	-3	Num 19:13
Mein Kampf	מין קאמפ	9832	Num 22:1

Skepticism

- War and Peace Codes?
 - Any large body of text will contain "codes"
- N.S.A.- (National Security Agency)
 - Dr. Harold Gaines – Senior Mathematician
 - Programmed home computer
 - took 440 hours (19 days)
 - Very small probability it occurred by chance
 - Now teaches the Torah codes in Synagogues around the world

The Exploitation Begins

- Michael Drosnin – *The Bible Code*
 - Denounced by true experts
 - uses bad mathematics
 - attacked by both sides of controversy
- Jeffrey Satinover - *Cracking The Bible Code*
- John Weldon - *Decoding The Bible Code*

Yeshua Codes

- Suggested by Rabbi Yakov Rambsel
- Consists of only four letters – two of which are the most common
- *Yeshua* occurs 5,538 times in the Old Testament – 2919 forward, 2619 backward

"The volume of the Book is written of me" Hebrews 10:7

Hebrew Frequencies

Tanakh Total	Frequency (%)	Tanakh Total	Frequency (%)
א	137,845	כ	33,468
ב	129,575	ז	32,368
ה	101,953	ח	27,600
א	95,674	פ	16,277
ל	88,302	ב	15,729
ר	68,058	ו	15,240
ב	65,211	ד	14,002
ה	63,196	צ	11,687
ש	58,194	נ	10,076
מ	57,630	ך	9,099
ע	44,808	ס	7,935
מ	41,291	ט	6,309
נ	39,852	ץ	3,288
		ף	2,554

Isaiah 53

Yeshua is my name	ישוע שמו	The Evil Roman City	רע עיר רומי
His Signature	מחתימו	Let Him be crucified	יעלב
Messiah	משיח	Moriah	הירם
Nazarene	נזיר	Cross	עלב
Galilee	גליל	Pierce	דקר
Shiloh	שילה	From the Atonement Lamb	מכפר טלא
Pharisee	פריש	Bread	הלחם
Levites	לויים	Wine	יין
Caiaphas	כאיפס	Obed	עבד
Annas	ענן	Jesse	יש
Passover	פסח	Seed	זרע
The man Herod	איש הורד	Water	מים
Wicked Caesar perish	קיסר עמל אכר	Jonah	יונה

Isaiah 53

The Disciples mourn	למרים אנן	Simon	שמעון
Peter	כפה	Thaddaeus	תדי
Matthew	מתתי	Matthias	מתיה
John	יוחנן	Mary	מרים
Andrew	אנדרי	Mary	מרים
Philip	פילף	Mary	מרים
Thomas	תומא	Salome	שלמית
James	יעקב	Joseph	יוסף
James	יעקב		

“Upon this basis I am going to show you how a bunch of bright young folks did find a champion: a man with boys and girls of his own; a man of so dominating and happy individuality that Youth is drawn to him as is a fly to a sugar bowl. It is a story about a small town. It is not a gossipy yarn; nor is it a dry monotonous account, full of such customary “fill-ins” as “romantic moonlight casting murky shadows down a long, winding country road.”

Statistical Behavior

- In English, “e’s” occur about 13%
- What’s the chance that the previous paragraph “happened” by accident?
- Taken from a 267-page novel: *Gadsby, A Story of Over Fifty Thousand Words Without Using the Letter E*, published in 1939 by Ernest Vincent Wright

*“The phenomenon is real;
what it means is up to the individual.”*

Prof. David Kashdan, Chairman,
Dept of Mathematics, Harvard, 1996.

The Dark Side of the Codes

- The Lure of the Occult
 - Kabbalah
 - Gematria
 - Gnostic Heresies
- Myopic Critics?
- Divination?

Next Session

- Proof that some of these codes
 - Are Macrocodes
 - From outside our Time Dimension
- How sure can we be?
 - Measuring our certainty
- Metacodes

Cosmic Codes
Audio Session 3 Handouts

Questions from
Cosmic Codes book
Chapters 5-7

Session 3:

Cosmic Codes

Information Sciences
&
The Bible

Rabbinical Proverb

“We really won’t understand the Scriptures until the Messiah comes. Yet when He comes, He will not only interpret the passages -- the words, the very letters, and even the spaces between the letters!”

Matthew 5:17, 18

Think not that I have come to destroy the Torah and the prophets; I have not come to destroy but to fulfill.

For verily I say unto you, Till heaven and earth pass, one jot or one tittle shall in no wise pass from the law, till all be fulfilled.

A Riddle

- Who is the oldest man in the Bible?
Methuselah; he lived 969 years.
- Yet he died before his father!
How can that be?
- His father was Enoch...
At age 65, something happened;
he then “walked with God” 300 years...

Genealogy of Genesis 5

Adam
Seth
Enosh
Kenan
Mahalalel
Jared
Enoch
Methuselah
Lamech
Noah

Adam

אָדָם *adomah*, means “man.”

Seth

שֵׁת *seth*, which means “appointed.”

Eve said, “For God hath appointed me another seed instead of Abel, whom Cain slew.” Genesis 4:25

Enosh

אֱנוֹשׁ which means “mortal,” “frail,” or “miserable.”

It is from the root *anash*, to be incurable; used of a wound, grief, woe, sickness, or wickedness.

Kenan

קֵינָן which can mean “sorrow,” “dirge,” or “elegy.”

Mahalalel

מְהַלְלֵל which means “blessed” or
“praise”; and
אל *El*, the name for God.

“The Blessed God.”

Jared (Yared)

יָרֵד from the verb *yaradh*, meaning

“shall come down.”

Enoch

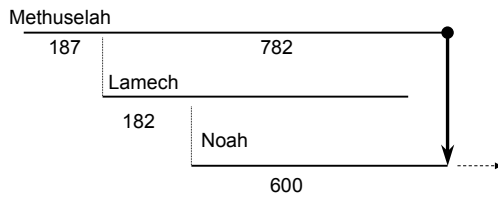
תְּנוּכָה which means “commencement,”
or
“Teaching.”

Methuselah

מות *muth*, a root that means “death”
שלה *shalach*, which means “to bring,” or
“to send forth.”

“His death shall bring.”

The Year of the Flood



Lamech

לָמַךְ a root still evident today in our
own English word, “lament” or
“lamentation.”

“Despairing.”

Noah

נח which is derived from *nacham*,
“to bring relief” or “comfort,”

“Comfort, or Rest”

Noah

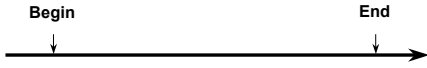
*And he called his name Noah, saying,
This same shall comfort us concerning
our work and toil of our hands, because
of the ground which the Lord hath
cursed.*

Genesis 5:29

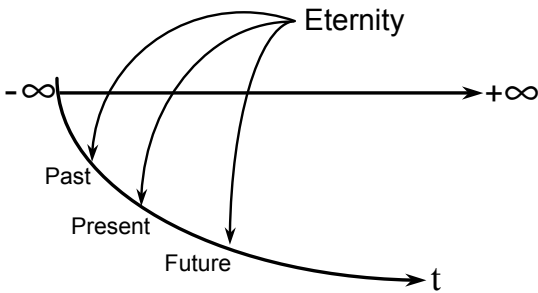
Genealogy of Genesis 5

Adam	<i>Man (is)</i>
Seth	<i>Appointed</i>
Enosh	<i>Mortal</i>
Kenan	<i>Sorrow; (but)</i>
Mahalalel	<i>The Blessed God</i>
Jared	<i>Shall come down</i>
Enoch	<i>Teaching</i>
Methuselah	<i>His death shall bring</i>
Lamech	<i>The Despairing</i>
Noah	<i>Comfort, Rest</i>

Linear Time?



The Geometry of Eternity



Design Challenge: A Genealogy

- The number of words must be divisible by 7, evenly.
- The number of letters must also be divisible by 7, evenly.
- The number of vowels and the number of consonants must also be divisible by 7.

Additional Requirements:

- The number of words that begin with a vowel must be divisible by 7.
- The number of words that begin with a consonant must be divisible by 7.

Additional Requirements:

- The number of words that occur more than once must be divisible by 7.
- occur in more than one form must be divisible by 7.
- occur in only one form must be divisible by 7.

Additional Requirements:

- The number of nouns shall be divisible by 7.
- Only 7 words shall not be nouns.
- The number of names shall be divisible by 7.
- Only 7 other kinds of nouns are permitted.

Additional Requirements:

- The number of male names shall be divisible by 7.
- The number of generations shall be divisible by 7. (21)

Additional Requirements:

- The number of male names shall be divisible by 7.
- The number of generations shall be divisible by 7. (21)
- *This is the genealogy of Jesus Christ found in Matthew 1:1-11, (in Greek)!*

Dr. Ivan Panin

- Born in Russia Dec 12, 1855
- Exiled at an early age; emigrated to Germany, and the the U.S.
- Graduated from Harvard in 1882;
- Discovered Christ;
- Discovered the heptadic structures underlying the Biblical text in 1890;
- Committed the rest of the 50 years of his life generating 43,000 pages of discoveries;
- Went to his Lord on October 30, 1942.

Unique Vocabularies?

- Vocabulary unique to Matthew
 - occurs 42 times (7 x 6)
 - with 126 letters (7 x 18).
- How could this have been organized?
 - Prior agreement with other authors?
 - Or was this Gospel written *last*?

Unique Vocabularies

- Gospel of Matthew
- Gospel of Mark
- Gospel of Luke
- Gospel of John
- James, Peter, Jude, and Paul
...*each* “*written last.*”

The Book of Esther

- Name of God does not appear?
- Esther = “Something Hidden”
- Hidden Codes:
 - 5 Acrostics
 - 3 Equidistant Letter Sequences

Esther 1:20

הַיָּהוָה יָשִׁיב אֶת-עֲצוֹת הָאֲדָמָה וְיִתְּנֵהוּ

הוהי

Initial letters: because the event was initial
Backwards: God was turning back the counsels of man.

Esther 5:4

יָבוֹא הַמֶּלֶךְ וְהָמָן הַיּוֹם

יהוה

Initial letters: God was initiating the action;
Forward: God was ruling and causing Esther to act.

Esther 5:13

זֶה אֵינְנִי שׂוֹהָ לִי

הוהי

Final letters: Haman's end was approaching;
Backwards: God was overruling Haman's gladness
and turning back Haman's counsel.

Esther 7:7

כִּי־כָלְתָהּ אֱלֹהֵי הַרְעָה

יְהוָה

Final: Haman's end had come;
Forward: God was ruling and bringing about the
end He had determined.

Different Speakers

- 1) Menech 1:20
- 2) Esther 5:4
- 3) Haman 5:13
- 4) By the writer 7:7

Pairings

- | | |
|--------------|---------------|
| • 1) Initial | • 1) Backward |
| • 2) Initial | • 2) Forward |
| • 3) Final | • 3) Backward |
| • 4) Final | • 4) Forward |

Initial: facts are initial Backward: Gentiles
Final: facts are final. Forward: Israelites

Introversion

- 1) Words spoken *concerning* a queen;
- 2) Words spoken *by* a queen;
- 3) Words spoken *by* Haman;
- 4) Words *concerning* Haman.

Esther 7:5

זֶה נְאֻמָּה הוּא

הִיחָא

"I AM"

The Seven "I Am" Statements

- I AM the Bread of Life (Jn 6:35)
- I AM the light of the world (Jn 8:12)
- I AM the door (Jn 10:9)
- I AM the good shepherd (Jn 10:11)
- I AM the resurrection and the life (Jn 11:35)
- I AM the way, the truth, and the life (Jn 14:6)
- I AM the true vine (Jn 15:1)

Esther 7:5

זֶה וְאַיִזָּה הוּא

הִיֵּהָא

"I AM"

"Who is he, and where is he, that durst presume in his heart to do so?"

Esther 1:3

An Equidistant Letter Sequence, interval of 8.

בְּשָׁנָה שְׁלוֹשׁ לְמַלְכוֹ עָשָׂה מִשְׁתֶּה לְכָל־שָׂרָיו וְעַבְדָּיו חֵיל

מְשִׁיחַ

Meshiach, Messiah

Esther 4:7

An Equidistant Letter Sequence, interval of 8.

וַיַּעֲבֵר מְרַדְּכִי וַיַּעַשׂ כְּכֹל אֲשֶׁר־צִוְתָהּ עָלָיו אַסְתֵּר: ס

עוֹשֵׂי

Yeshua, Jesus

Esther 4:2

An Equidistant Letter Sequence, interval of 7.

וַיָּבֹא עַד לִפְנֵי שַׁרְהֲמַלְךָ כִּי אִין לְבוֹא אֶל־שַׁרְהֲמַלְךָ בְּלִבּוֹשׁ שָׂקִי;
וּבְכִלְמֵרִינָה וּמְדִינָה מְקוֹם אֲשֶׁר דִּבְרַתְהֲמַלְךָ וְרָחַו מִנִּיעַ

אֱלֹשָׁדַי

El Shaddai, The Almighty

Esther 3:11-12

An Equidistant Letter Sequence, interval of 6.

וַיֹּאמֶר הַמֶּלֶךְ לְהִמָּן הַכַּסְפָּךָ נָתוּן לָךְ וְהָעַם לַעֲשׂוֹת בּוֹ
כַּטּוֹב בְּעֵינֶיךָ:
וַיִּקְרְאוּ סִפְרֵי הַמֶּלֶךְ בַּחֲדָשׁ הָרִאשׁוֹן בַּשְּׁלוֹשָׁה עָשָׂר יוֹם

Esther 3:11-12

An Equidistant Letter Sequence, interval of 6.

וַיֹּאמֶר הַמֶּלֶךְ לְהִמָּן הַכַּסְפָּךָ נָתוּן לָךְ וְהָעַם לַעֲשׂוֹת בּוֹ
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הַמֶּן וְשַׁטָּן רִיחַ

haman v'satan ray'yach

Esther 3:11-12

An Equidistant Letter Sequence, interval of 6.

וַיֹּאמֶר הַמֶּלֶךְ לְהִמָּן הַכַּסְפָּה נָתַן לְךָ וְהָעַם לַעֲשׂוֹת בּוֹ
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המן ושטן ריח

haman v'satan ray'yach

"Haman and Satan stink."

Pilate's Epitaph

יֵשׁוּעַ הַנַּצְרִי וּמֶלֶךְ הַיְהוּדִים

HaYehudim v'Melech HaNazarei Yeshua

Jesus the Nazarei and King of the Jews

Pilate's Epitaph

יֵשׁוּעַ הַנַּצְרִי וּמֶלֶךְ הַיְהוּדִים

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Jesus the Nazarei and King of the Jews

י ה ו ה

The Tetragrammaton

Cosmic Codes
Audio Session 4 Handouts

Questions from
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Chapters 8-9 and 19-20

Session 4:

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&
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Hebrew Language

- Pictorial Ideograms (*Sememes*)
- as well as *Phonemes*

 Aleph 

= “First”; “Strength”; or “Leader”

 Bet 

- “House”; “Family”
- Beth Lehem; Beth-El; etc.

— Δ β Ab אב

Aleph-Beth: “Leader of the House”
= “Father”

H Heh ה

(Hands lifted up; open window)
= “Behold”; “Revealed”
Also, “wind;” “Spirit”

— Δ H β Ahab אהב

Revealing the *heart* or *essence* of
the Father...

“Love”

Names Changed

(Gen 17)

אַבְרָם	Abram
שָׂרַי	Sarai
אַבְרָהָם	Abraham
שָׂרָה	Sarah

Self-Parsing Feature

5 "final forms":

Kaf:	כ	ך
Mem:	מ	ם
Nun:	נ	ן
Peh:	פ	ף
Tzaddi:	צ	ץ

Hebrew Language

- Ideograms + Phonemes
- Self-Parsing: 5 "final forms"
- Vowels are inferred
- Maximizes available bandwidth

Genesis 15:17

And it came to pass, that, when the sun went down, and it was dark, behold a smoking furnace, and a burning lamp that passed be-tween those pieces.

וַיְהִי הַשָּׁמַשׁ בָּאָה וְעֵלְשָׁה הָיָה וְהָגָה תְּנוּרָה עֶשֶׂן וְלַפִּיד
אֵשׁ אֲשֶׁר עָבַר בֵּין הַנְּזָרִים הָאֵלֶּה:
אֵשׁ אֲשֶׁר עָבַר בֵּין הַנְּזָרִי
אֵשׁ אֲשֶׁר עָבַר בֵּין הַנְּזָרִי
אֵשׁ אֲשֶׁר רָעַ בְּרַבִּין הַ גִּזְרִי
decreed God into Rabin evil fire fire
"An evil fire (twice) into Rabin God decreed..."

Mysticism

- Mysticism – an interest in having a direct connection to the Divine
- John and Paul were themselves mystics
- Based on the Word of God
- Occult – Based on *other than* the Word of God

Divination

Prohibited in Scripture as a capital crime
-punishable by stoning

Numerology

•**Numerology** – The study of numbers, numerals, and structural designs

- Numbers: amounts, quantities
- Numerals: symbols or expressions that represent numbers
- The structure of the text: *7 letters to 7 churches*

•**Numerics** – The symbolic use of numbers

- Cryptically
- Mystically

•**Gematria** – The numerical values of an alphabet

Numerics

- 1 = Unity
- 2 = Witnessing
- 3 = Trinity
- 4 = Creation
- 5 = Grace
- 6 = Sin, Man, Incompleteness
- 7 = Completeness
- 8 = New Beginning
- 10 = Judicial Testimony
- 12 = Government
- 24 = Priesthood

Inter-Testament Heptadic Bridges

“Hallelujah”	24	4	28	7 x 4
“Hosanna”	1	6	7	7 x 1
“Shepherd”	12	9	21	7 x 3
“Jehovah Sabaoth”	285	2	287	7 x 41
“Corban”	82	2	84	7 x 12
“Milk”	44	5	49	7 x 7
“Isaac”	112	14	126	7 x 18
“Aaron”	443	5	448	7 x 16
“Abaddon”	6	1	7	7 x 1
“Christ at the right hand of God”	2	19	21	7 x 3
“After Melchizedek”	1	6	7	7 x 1
“Stone ...refused...headstone...”	1	6	7	7 x 1
“Love thy neighbor as thyself”	1	6	7	7 x 1
“Uncircumcision of the heart”	6	1	7	7 x 1

The Strategic Discoveries

Job Genesis, Exodus, Leviticus, Numbers, Deuteronomy Joshua Judges, 1 & 2 Samuel, 1 & 2 Kings 1 & 2 Chronicles, Ezra, Nehemiah Esther Psalms Proverbs, Ecclesiastes Isaiah Jeremiah, Lamentations Ezekiel Daniel Minor Prophets Matthew Luke John, 1, 2, 3 John, Revelation Mark, 1, 2 Peter 14 epistles James Jude	? Moses ? Samuel ? Ezra ? David + Solomon + Isaiah Jeremiah Ezekiel Daniel The 12 Matthew Luke John Peter Paul James Jude
---	---

66 books
40 Authors
~2000 years

Hebrew Alphanumerics

א 1	י 10	ק 100
ב 2	כ 20	ר 200
ג 3	ל 30	ש 300
ד 4	מ 40	ת 400
ה 5	נ 50	ך 500
ו 6	ס 60	ם 600
ז 7	ע 70	ן 700
ח 8	פ 80	ף 800
ט 9	צ 90	ץ 900

Greek Alphanumerics

α 1	ι 10	ρ 100
β 2	κ 20	σ ς 200
γ 3	λ 30	τ 300
δ 4	μ 40	υ 400
ε 5	ν 50	φ 500
ς* 6	ξ 60	χ 600
ζ 7	ο 70	ψ 700
η 8	π 80	ω 800
θ 9	α* 90	ξ* 900


*Vau (6), koppa (90), and samsi (900), later became extinct.

And he made a molten sea, ten cubits from the one brim to the other: it was round all about, and his height was five cubits: and a line of thirty cubits did compass it round about.

1 Kings 7:23

The "Molten Sea"

1 Kings 7:23



Circumference =
 3 x diameter? No!
 π x diameter
 $\pi = 3.14159265358979$

And he made a molten sea, ten cubits from the one brim to the other: it was round all about, and his height was five cubits: and a line of thirty cubits did compass it round about.

וַיַּעַשׂ אֶת־הַיָּם מוֹצֵק עֲשָׂר בָּאַמָּה מִשְׁפָּתוֹ עַד־שְׁפָתוֹ
 עָגֹל סָבִיב וְחָמֵשׁ בָּאַמָּה קוֹמָתוֹ (וְקוֹנָה)
 וְשֵׁלְשִׁים בָּאַמָּה יָסַב אֹתוֹ סָבִיב: *kethiv*
qere

1 Kings 7:23

A Spelling Lesson

קוה *kethiv* (written variation) 111

קי *qere* (marginal annotation) 106

ק = 100 $10 \times 3 \times 111/106 =$
ו = 6 31.41509433962 cubits
ה = 5 ***...in a circumference of over 46 feet,
an error of less than 15 thousandths
of an inch!***

The Battle of 9 Kings

Genesis 14

Shemites	Hamites
Amraphel, king of Shinar	Bera, king of Sodom
Arioch, king of Ellasar	Birsha, king of Gomorrah
Chedorlaomer, king of Elam	Shinab, king of Admah
Tidal, king of nations;	Shemeber, king of Zeboiim
	King of Bela (Zoar)

- Served Chedorlaomer 12 years; 13th year rebelled
- Chedorlaomer defeated and spoiled the rebels
- Took Lot, Abram's nephew, captive from Sodom

The Slaughter of the Kings

- Abram's army (318 trained servants) rescues Lot, and the people of Sodom

The 153 Fishes in the Gospel of John

•John 21:11 *Simon Peter went up, and drew the net to land full of great fishes, an hundred and fifty and three: and for all there were so many, yet was not the net broken.*

•Why 153 fish?

•Cyril of Alexander: representing God and the church? 100 = number of fullness of Gentiles (Mt 18:12); 50 the remnant of Israel; 3 the Trinity (?)

•Augustine: 10, the number of the law; 7 the number of grace. 10+7=17; sum of 1 to 17 = 153. Jerome: Ancient belief that there were 153 kinds of fish in the sea. (All nations gathered together to Christ?)

The Name of Jesus

Jesus = Ιησους = 888

Revelation 13:18

666

- Cesar Nero
- Almost anyone
- Ultimately inconclusive

666

Χριστός *Christos*
X ξ ς *Antichrist = Pseudo-christ*

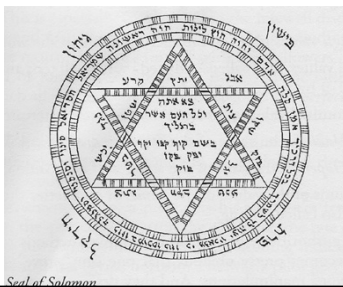
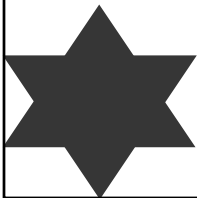
χ 600
ξ 60
ς 6
666

The AntiChrist

Adversary Ps 74:8-10; Isa 59:19; Lam 4:11, 12; Amos 3:11
Assyrian Isa 10:5,12
Belial Nahum 1:15
Bloody and Deceitful Man Ps 5:6
Branch of the Terrible Ones Isa 25:5; (cf. Isa 14:19)
Chief Prince Ezek 38:2
Crooked Serpent Job 26:13; Isa 27:1
Cruel One Jer 30:14,23
Destroyer of the Gentiles Jer 4:7
Enemy Ps 55:3; Jer 30:14, 23
Evil Man Ps 140:1
Head over many countries Ps 110:6
Head of Northern Army Joel 2:20
Idol Shepherd Zech 11:16, 17
King of Princes Hos 8:10
King of Babylon Isa 14:11-20; (cf. 30:31-33)
Little Horn Dan 7:8-11, 21-26; 8:9-12,23-25
Man of the Earth Ps 10:18
Merchant, with balances of deceit Hos 12:7
Mighty Man Ps 52:1
Nail Isa 22:25
Prince that shall come Daniel 9:26
Prince of Tyre Ezek 28:2-10
Profane Wicked Prince of Israel Ezek 21:25-27
Proud Man Hab 2:5
Rod of God's anger Isa 10:5
Seed of the Serpent Gen 3:15
Son of the Morning Isa 14:12
Spoiler, Destroyer Isa 16:4,5
Vile Person Dan 11:21
Violent Man Ps 140:1, 10, 11
Wicked, Wicked One Ps 9:17; 10:2,4; Isa 11:4; Jer 30:14, 23
Willful King Dan 11:36

New Testament
Angel of the Bottomless Pit Rev 9:11
Antichrist, Pseudo-Christ 1 Jn 2:22
Beast Rev 11:7; 13
False Prophet Rev 13
Father of the lie Jn 8:44; 2 Thess 2:11
Lawless One 2 Thess 2:8
Man of Sin 2 Thess 2:3
One come in his own name Jn 5:43
Prince of Darkness 1 Thess 5
Son of Perdition 2 Thess 2:3
Star Rev 8:10; 9:1
Unclean Spirit Mt 12:43
Vine of the earth Rev 14:18

The Shield of David



The Book of Revelation

- Every idiom is in code but every code is explained somewhere else in the Bible
- Contains 404 verses, including over 800 allusions to the Old Testament
- The Revelation of Jesus Christ, which God gave unto Him, to show unto his servants things which must shortly come to pass; and He sent and signified it by his angel unto his servant John* Rev. 1:1
- First three chapters contain 24 different titles for Jesus Christ – these are used as linkages through the rest of the book
- Only book of the Bible with an outline

The Fate of Soloman

- Started off great
- Ultimately went into apostasy
 - Married foreign wives
 - Erected pagan idols in the Temple
 - Results in war and division

Unlike David who remained faithful to God

The 7 Forms of Gematria

- Ragil- each letter has a numerical value
- Kolel- ragil + the number of letters per word
- Katan- 10's and 100's reduced to 1-9 by summing digits
- Hakadmi- nominal values plus the value of each letter preceding it
- Hameruba Haklali- the value of each word squared
- Hameruba Haperati- the sum of the squares of each letter
- Miluy- sums of the values of the names of each letter

Cosmic Codes
Audio Session 5 Handouts

Questions from
Cosmic Codes book
Chapters 14-16

Session 5:

Cosmic Codes

Information Sciences
&
The Bible

What is a Macrocode

- An anticipatory structural declaration
- Word Processors:
 - FAX, email, Letter templates, et al

*Until we can measure a thing,
we really know very little about it.*

William Thomson (Lord Kelvin)

For we have not followed cunningly devised fables, when we made known unto you the power and coming of our Lord Jesus Christ, but were eyewitnesses of his majesty.

2 Peter 1:16

We have also a more sure word of prophecy; whereunto ye do well that ye take heed, as unto a light that shineth in a dark place, until the day dawn, and the day star arise in your hearts:

2 Peter 1:19

Prophetic Scriptures

- 8,362 predictive verses
- 1,817 predictions
- 737 separate matters

J. Barton Payne, *Encyclopedia of Biblical Prophecy*

Genesis 22
The Offering of Isaac
The Akedah

And it came to pass after these things, that God did tempt Abraham, and said unto him, Abraham: and he said, Behold, here I am.

And he said, Take now thy son, thine only son Isaac, whom thou lovest, and get thee into the land of Moriah; and offer him there for a burnt offering upon one of the mountains which I will tell thee of.

Genesis 22:1,2

And Abraham rose up early in the morning, and saddled his ass, and took two of his young men with him, and Isaac his son, and clave the wood for the burnt offering, and rose up, and went unto the place of which God had told him.

Genesis 22:3

Then on the third day Abraham lifted up his eyes, and saw the place afar off.

And Abraham said unto his young men, Abide ye here with the ass; and I and the lad will go yonder and worship, and come again to you.

And Abraham took the wood of the burnt offering, and laid it upon Isaac his son; and he took the fire in his hand, and a knife; and they went both of them together.

Genesis 22:4-6

And Isaac spake unto Abraham his father, and said, My father: and he said, Here *am* I, my son. And he said, Behold the fire and the wood: but where is the lamb for a burnt offering?

And Abraham said, My son, God will provide himself a lamb for a burnt offering: so they went both of them together.

Genesis 22:7,8

And Isaac spake unto Abraham his father, and said, My father: and he said, Here *am* I, my son. And he said, Behold the fire and the wood: but where is the lamb for a burnt offering?

And Abraham said, My son, God will provide himself a lamb for a burnt offering: so they went both of them together.

Genesis 22:7,8

And the angel of the LORD called unto him out of heaven, and said, Abraham, Abraham: and he said, Here *am* I.

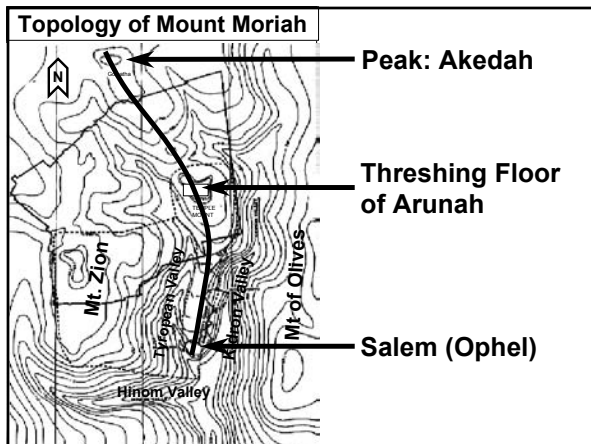
And he said, Lay not thine hand upon the lad, neither do thou any thing unto him: for now I know that thou fearest God, seeing thou hast not withheld thy son, thine only *son* from me.

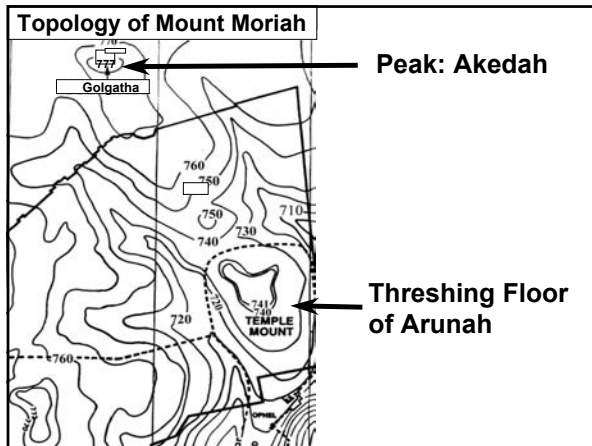
Genesis 22:11,12

And Abraham lifted up his eyes, and looked, and behold behind *him* a ram caught in a thicket by his horns: and Abraham went and took the ram, and offered him up for a burnt offering in the stead of his son.

And Abraham called the name of that place *Jehovahjireh*: as it is said to this day, In the mount of the LORD it shall be seen.

Genesis 22:13,14





A Bride for Isaac
Genesis 24

- Abraham commissions Eleazar to gather a bride for Isaac.
- Eleazar qualifies her by a well;
- She agrees to marry the bridegroom;
- He gives her gifts...
- She joins her bridegroom at the well of *Lahai-Roi*.

Who Left the Mount?

So Abraham returned unto his young men, and they rose up and went together to Beersheba; and Abraham dwelt at Beersheba.

Genesis 22:19

Where's Isaac?

Where's Isaac?

Isaac is personally “edited out of the record” until he is united with his bride by the well of *LaHai Roi*,
...two chapters later.

(The well of *LaHai Roi*: “the well of Living One [who] sees me.”)

Joshua vs. Revelation

- (*Yehoshua* is a variant of *Yeshua*)
- A military commander dispossessing the usurpers
- 7 year campaign
 - Against 7 (of an original 10) nations
- Torah ignored at Jericho: (Sabbath ignored; Levites involved)
 - First sent in “Two Witnesses”
 - Seven Trumpet Events
 - (preceded by “Silence in heaven for ½ hour”)
- Enemies confederated under a leader in Jerusalem
 - *Adoni-Zedek*, “*Lord of Righteousness*”
- Ultimately defeated with
 - Hailstones and fire from heaven
 - Signs in the Sun, Moon, etc.
- Kings hide in caves; (“Rocks fall on us...”)

The Camp of Israel

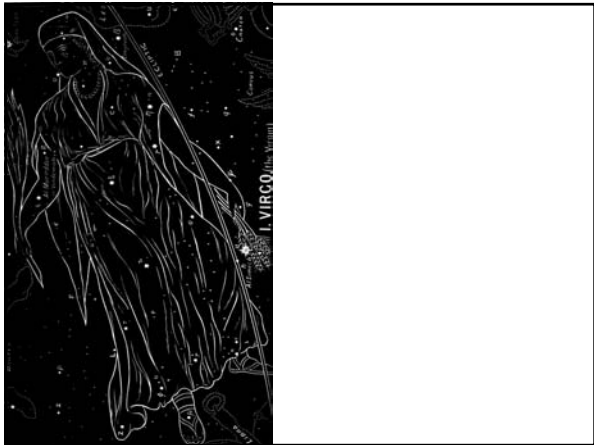
Numbers 2

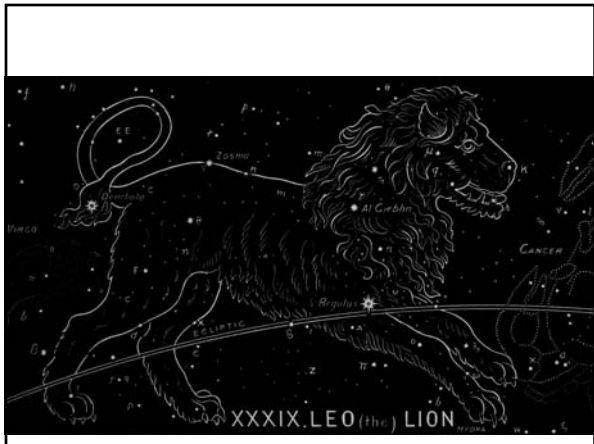
- Every Detail by *Design*?
- What might be hidden behind the details of the Camp of Israel?
- “*The volume of the Book is written of Me*”

Psalm 40:7; Hebrews 10:7

20



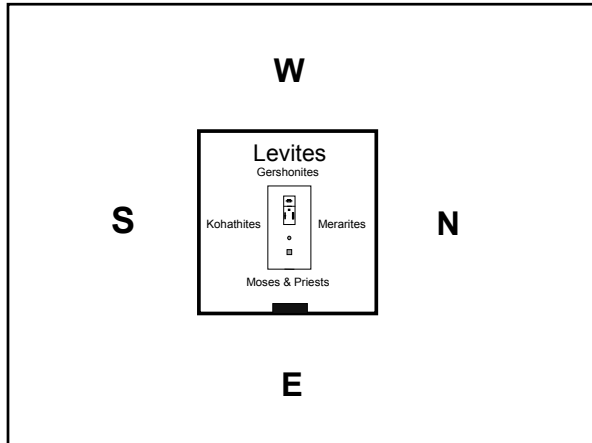




The Camp of Israel

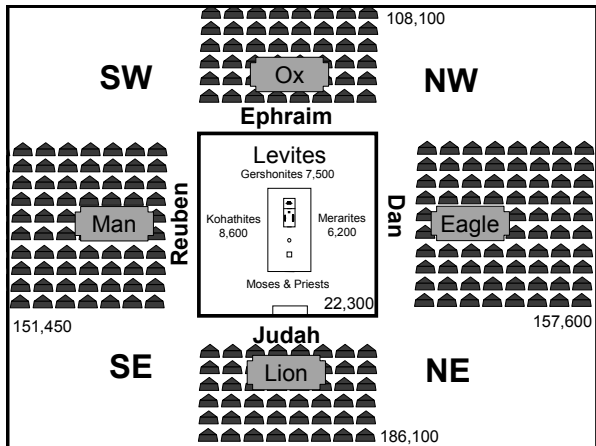
Numbers 2

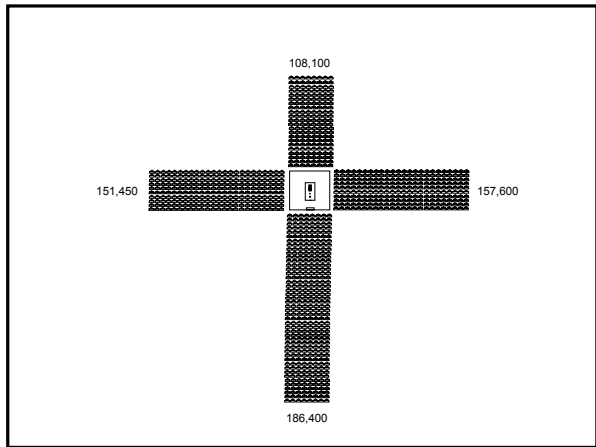
Judah	74,600	Ephraim	40,500
Issachar	54,400	Manasseh	32,200
Zebulun	<u>57,400</u>	Benjamin	<u>35,400</u>
	186,400		108,100
Reuben	46,500	Dan	62,700
Simeon	59,300	Asher	41,500
Gad	<u>45,650</u>	Naphtali	<u>53,400</u>
	151,450		157,600




Rabbinical Precision

- The Camp of Judah: East of Levites
- The Camp of Reuben: South of Levites
- Strict obedience denies area Southeast
- Thus, only cardinal directions ordained
- Only width of Levite's camp allowed
- Length proportional to population







Measuring Our Certainty
 How Sure Can We Be?

The Old Testament

(The *Tenach*)

- These Hebrew Scriptures were translated into Greek by 270 BC.
- They contain over 300 prophecies detailing the Coming Messiah.
- We are now going to examine just 8 of them.

Number 1

But thou, Bethlehem Ephratah, though thou be little among the thousands of Judah, yet out of thee shall he come forth unto me that is to be ruler in Israel; whose goings forth have been from of old, from everlasting.

Micah 5:2





Born in Bethlehem

- What is the probability of any person, taken at random, of fulfilling this?

$P \leq 10,000 / 1,000,000,000$
 $P \leq 10^4 / 10^9 = 1:10^5$

Number 2

*Rejoice greatly, O daughter of Zion;
 shout, O daughter of Jerusalem:
 behold, thy King cometh unto thee:
 he is just, and having salvation;
 lowly, and riding upon an ass, and
 upon a colt the foal of an ass.*

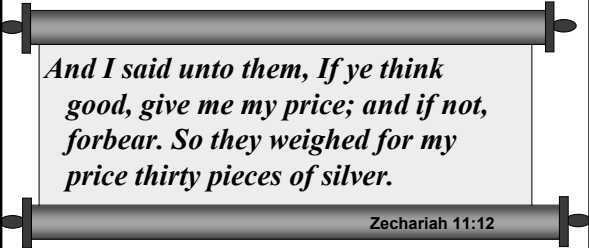
Zechariah 9:9

Zechariah 9:9

- How many have presented themselves as a king to Jerusalem riding a donkey?

p ≤ 1:100

Number 3



And I said unto them, If ye think good, give me my price; and if not, forbear. So they weighed for my price thirty pieces of silver.

Zechariah 11:12

Zechariah 11:12

- How many people have been betrayed for 30 pieces of silver?

p ≤ 1:1,1000

Number 4

And the Lord said unto me, Cast it unto the potter: a goodly price that I was prized at of them. And I took the thirty pieces of silver, and cast them to the potter in the house of the Lord.

Zechariah 11:13

*Then Judas, which had betrayed him, when he saw that he was condemned, repented himself, and brought again the thirty pieces of silver to the chief priests and elders, saying, "I have sinned in that I have betrayed the innocent blood."
And they said, "What is that to us? see thou to that."
And he cast down the pieces of silver in the temple, and departed, and went and hanged himself.*

Matthew 27:4-5

*And the chief priests took the silver pieces, and said, "It is not lawful for to put them into the treasury, because it is the price of blood."
And they took counsel, and bought with them the potter's field, to bury strangers in.
Wherefore that field was called, The field of blood, unto this day.*

Matthew 27:6-8

The Precision of Zech 11:13

- Price: 30 pieces of silver
- Location of the the transaction:
the House of the Lord (Temple);
- Who ends up with the money?
The Potter

p ≤ 1:100,000

Number 5

*And one shall say unto him,
“What are these wounds in thine
hands?”*

*Then he shall answer,
“Those with which I was wounded in
the house of my friends.”*

Zechariah 13:6

Thomas' Unbelief

*But he [Thomas]said unto them,
“Except I shall see in his hands the
print of the nails, and put my finger
into the print of the nails, and thrust
my hand into his side, I will not
believe.”*

John 20:25

*And Thomas answered and said unto him,
"My Lord and my God."
Jesus saith unto him,
"Thomas, because thou hast seen me, thou
hast believed: blessed are they that have not
seen, and yet have believed."
John 20:28, 29*

Zechariah 13:6

- How many people, taken at random, have been "wounded in their hands" in "the house of their friends?"

$p \leq 1:1,000$

Number 6

*He was oppressed, and he was
afflicted, yet he opened not his
mouth: he is brought as a lamb to
the slaughter, and as a sheep before
her shearers is dumb, so he openeth
not his mouth.*

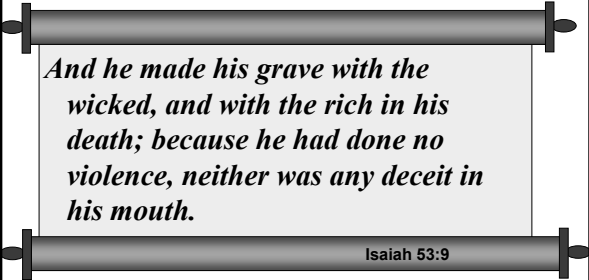
Isaiah 53:7

Isaiah 53:7

- How many prisoners, accused of a capital crime, make no defense even though innocent?

p ≤ 1:1,000

Number 7



And he made his grave with the wicked, and with the rich in his death; because he had done no violence, neither was any deceit in his mouth.

Isaiah 53:9

Isaiah 53:9

- How many died among the wicked, yet were buried with the rich?

p ≤ 1:1,000

Number 8

For dogs have compassed me: the assembly of the wicked have inclosed me: they pierced my hands and my feet.

Psalm 22:16

Psalm 22:16

(700 years before crucifixion invented)

- How many, taken at random, have died by having hands and feet pierced?

$p \leq 1:1,000$

8 Prophecies

Micah 5:2	Born in Bethlehem	1:100,000
Zechariah 9:9	King on Donkey	1:100
Zechariah 11:12	30 pieces of Silver	1:1,000
Zechariah 11:13	Temple, Potter, etc.	1:100,000
Zechariah 13:6	Wounds in hands	1:1,000
Isaiah 53:7	No defense; innocent	1:1,000
Isaiah 53:9	Died with the wicked Grave with the rich	1:1,000
Psalm 22:16	Crucified	<u>1:1,000</u>
		?

8 Prophecies

Micah 5:2	Born in Bethlehem	1:100,000
Zechariah 9:9	King on Donkey	1:100
Zechariah 11:12	30 pieces of Silver	1:1,000
Zechariah 11:13	Temple, Potter, etc.	1:100,000
Zechariah 13:6	Wounds in hands	1:1,000
Isaiah 53:7	No defense; innocent	1:1,000
Isaiah 53:9	Died with the wicked	1:1,000
	Grave with the rich	
Psalm 22:16	Crucified	<u>1:10,000</u>
		1:10²⁸

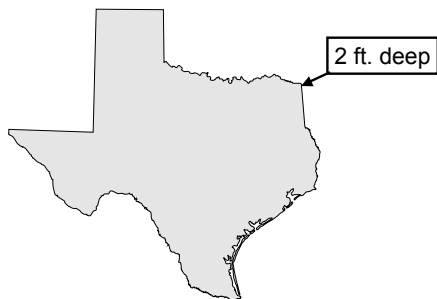
8 Prophecies Combined

- Total population ≤ 100 billion (10^{11})
- Combined probabilities:

$$10^{28}/10^{11} = 10^{17}$$

- A "bucket" of 10^{17} silver dollars?

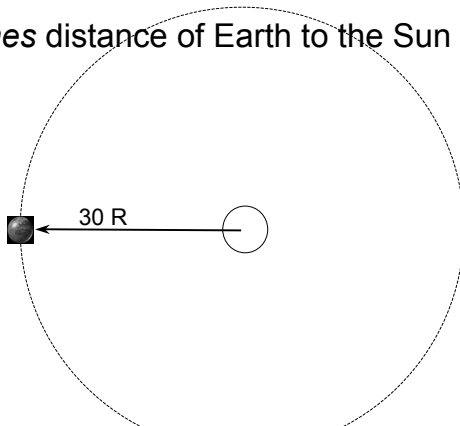
The State of Texas



16 Prophecies Combined

- Over 300 to choose from;
- The next 8 would be more specific (each less likely than the previous);
- Assuming *no decrease* in likelihoods:
 $10^{28} \times 10^{28} = 10^{56}$
 $10^{56}/10^{11} = 10^{45}$
- How big of a “bucket” do we need now?

30 Times distance of Earth to the Sun



48 Prophecies Combined

- (Over 300 to choose from)
- Assuming no decrease in likelihoods:
 $10^{28} \times 10^{28} \times 10^{28} \times 10^{28} \times 10^{28} \times 10^{28} = 10^{168}$
 $10^{168}/10^{11} = 10^{157}$
- Silver dollars won't work this one...

48 Prophecies: 10^{157}

- Make a “ball” of every atom in the universe: 10^{66}
- Make one *for each atom* of the universe:
 $10^{66} \times 10^{66} = 10^{132}$
- Repeat this exercise *every second since the universe began*:
 $10^{132} \times 10^{17} = 10^{149}$

48 Prophecies: 10^{157}

- 10^{149} vs 10^{157} ?
- ...we are still short by 10^8 :
100,000,000 times!
- ...and we've dealt with only 48 of over 300 prophecies!

Excerpted from Hour 13, *Learn the Bible in 24 Hours*, © Koinonia House, Inc.



The Most Amazing Ones

- His detailed genealogy;
- Old Testament *Midrashic* Prophecies. . .
- The specific prediction of the precise day that the Messiah would present Himself as King to Jerusalem;

Cosmic Codes
Audio Session 6 Handouts

Questions from
Cosmic Codes book
Chapters 17-18

Session 6:

Cosmic Codes

Information Sciences
&
The Bible

The Appointed Times

And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years:

Genesis 1:14

“seasons”: המועדים “the appointed times”

המועדים The Appointed Times

- Statistical expectation: 5 times in the 78,064 letters of Genesis;
- As an *equidistant letter sequence*, it appears **only once** in Genesis;
- At an interval of 70;
- It is centered on Genesis 1:14.
- Odds against this by unaided chance have been estimated at greater than *70,000,000 to one!*

“Appointed Times”

Leviticus 23

- 52 sabbaths
- + 7 days of Passover (including its related feast days)
- + 1 *Shavout*, Feast of Weeks (Pentecost)
- + 1 *Yom Teruah*, Feast of Trumpets
- + 1 *Yom Kippur*, Day of Atonement
- + 7 days of *Sukkot*, Feast of Tabernacles
- + 1 *Shimini Atzeret*, 8th Day of Assembly

- 70

The Feasts of Israel

- Passover
 - Feast of Unleavened Bread
 - Feast of First Fruits
 - The Feast of Weeks
 - Feast of Trumpets
 - Yom Kippur
 - The Feast of Tabernacles
- } Nisan
1st Month
- } Tishri
7th Month

The Heptadic Calendar

- The Week of Days *Shabbat*
- The Week of Weeks *Shavout*
- The Week of Months The Religious Year
- The Week of Years The Sabbatical Year
- Seven Weeks + 1 The Jubilee Year
 - All Land reverts to its owners
 - All Slaves go free
 - All Debts forgiven
 - “The time of the restitution of all things” Acts 3:21

The Feasts of Israel

- Each feast has two roles
 - Historically commemorative
 - Prophetic
- “A shadow of things to come”
Colossians 2:16,17

Passover

- Starts four days in advanced when Passover lambs are examined to be “without blemish”
- Offered between the evenings of the 14th of Nisan
- In commemoration of the passover of Egypt
- Foreshadows our Passover in Christ
- “Not a bone was to be broken”

The Feast of Unleavened Bread

(Hag haMatzah)

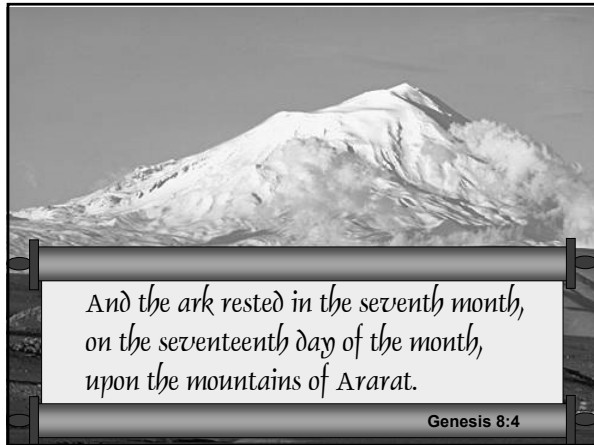
- Leaven - a symbol of sin
 - corrupts by puffing up
- Three *Matzahs* (unleavened bread)
 - pierced and striped
 - middle one broken in pieces, wrapped, hidden

There were two thieves crucified with him, one on the right hand, and another on the left.
Matthew 27:38

And when Joseph had taken the body and laid it in his own new tomb, which he had hewn out in the rock: and he rolled a great stone to the door of the sepulchre, and departed.
Matthew 27:59,60

The Feast of First Fruits

- The Morrow after *Shabbat* after Passover
 - Passover always the 14th of Nisan
 - After Passover, Feast of Unleavened Bread
 - Next Morning after that is the Feast of First Fruits
 - Always a Sunday
- Dispute between Jews and Samaritans
 - Samaritans interpreted it correctly
- Jesus was the First Fruits of the Resurrection



*And the ark rested in the seventh month,
on the seventeenth day of the month,
upon the mountains of Ararat.*

Genesis 8:4

Months	Old	New
Tishri, (Ethanin)	1	7
Cheshvan, (Bul)	2	8
Chisleu	3	9
Tevet	4	10
Sh'vat	5	11
Adar	6	12
Nisan, (Aviv)	7	1
Ilyar (Zif)	8	2
Sivan	9	3
Tammuz	10	4
Av	11	5
Elul	12	6

New Beginnings

Crucified on the 14th of Nisan;
In the grave: 3 days;
Resurrection: 17th of Nisan
(the "7th month" of the Genesis Calendar)

Shavout

- The Feast of Weeks
- The Feast of Pentecost
- Use leavened bread

The Mystery of Enoch

- Uttered the first prophecy
-It was about the second coming of Christ!
- Born on Shavout
- Removed prior to the judgment of the flood
-Raptured on his birthday?
- A type of the Church?

Prophetic Scriptures

- 8,362 predictive verses
- 1,817 predictions
- 737 separate matters

J. Barton Payne, *Encyclopedia of Biblical Prophecy*

The “70 Weeks” of Daniel

The Scope	9:24
The 69 Weeks	9:25
(The Interval)	9:26
The 70th Week	9:27

The Scope

Seventy weeks are determined upon thy people and upon thy holy city, to finish the transgression, to make an end of sins, to make reconciliation for iniquity, to bring in everlasting righteousness, to seal up the vision and prophecy, and to anoint the most Holy Place.

Daniel 9:24

The 69 Weeks

Know therefore and understand, that from the going forth of the commandment to restore and to build Jerusalem unto the Messiah the King shall be seven weeks, and threescore and two weeks: the street shall be built again, and the wall, even in troublous times.

Daniel 9:25

The Confidential Briefing

When ye therefore shall see the Abomination of Desolation, spoken of by Daniel the prophet, stand in the holy place, (whoso readeth, let him understand:)

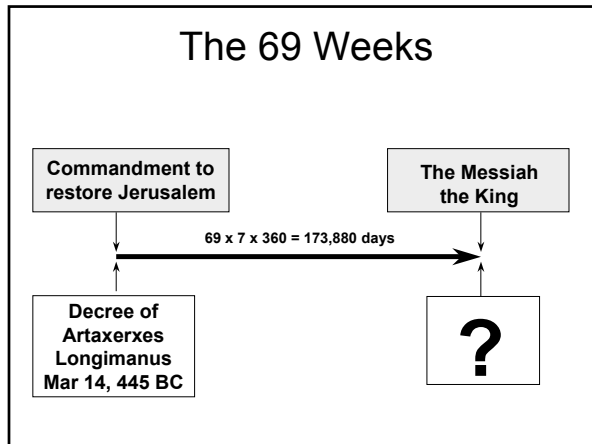
Matthew 24:15

The 69 Weeks

Know therefore and understand, that from the going forth of the commandment to restore and to build Jerusalem unto the Messiah the King shall be seven weeks, and threescore and two weeks: the street shall be built again, and the wall, even in troublous times.

Daniel 9:25

The 69 Weeks



Zechariah 9:9

*Rejoice greatly, O daughter of Zion; shout, O daughter of Jerusalem: behold, thy **King** cometh unto thee: he is just, and having salvation; lowly, and riding upon an ass, and upon a colt the foal of an ass.*

Luke 19:38

*Saying, Blessed be the **King** that cometh in the name of the Lord: peace in heaven, and glory in the highest.*

(quoting Psalm 118)

Luke 19:39

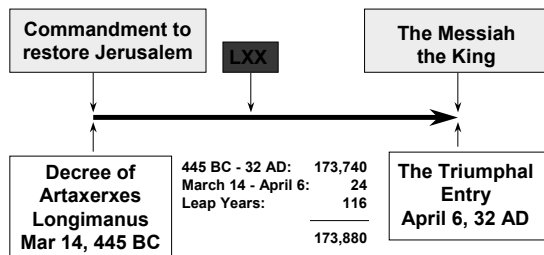
And some of the Pharisees from among the multitude said unto him, "Master, rebuke thy disciples."

(Why?)

Luke 19:40

And He answered and said unto them, I tell you that, if these should hold their peace, the stones would immediately cry out.

The 69 Weeks



Luke 19:41,42

And when he was come near, he beheld the city, and wept over it, Saying, If thou hadst known, even thou, at least in **this thy day**, the things which belong unto thy peace! but now they are hid from thine eyes.

Luke 19:43,44

For the days shall come upon thee, that thine enemies shall cast a trench about thee, and compass thee round, and keep thee in on every side, And shall lay thee even with the ground, and thy children within thee; and they shall not leave in thee one stone upon another...

...because thou knewest not the time of thy visitation.

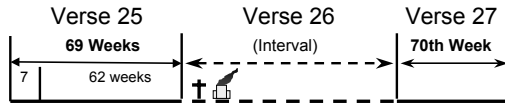
The Interval

And after threescore and two weeks shall Messiah be cut off, but not for himself: and the people of the prince that shall come shall destroy the city and the sanctuary; and the end thereof shall be with a flood, and unto the end of the war desolations are determined.

Daniel 9:26

The Interval

(not to scale)



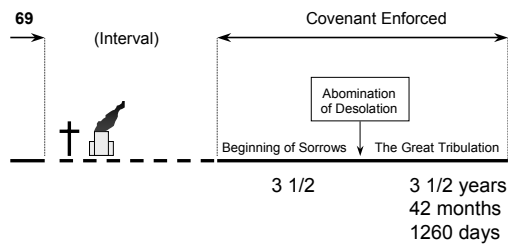
The 70th Week

And he ("the prince that shall come") shall enforce the covenant with [the] many for one week:

and in the midst of the week he shall cause the sacrifice and the oblation to cease, and for the overspreading of abominations he shall make it desolate, even until the consummation, and that determined shall be poured upon the desolate.

Daniel 9:27

The 70th Week



1) Abraham to the Exodus			
Promise (Gen 12:4)	75 years		
Gal. 3:17	<u>+430</u>	505	
Ishmael, (Gen 16:16;21:5)		<u>-15</u>	490 years
2) Exodus to the Temple			
Began: 1 Ki. 6 - 8	594		
Completed: 1 Ki 6:38;	<u>+7</u>	601	
Servitudes: Judges			
Mesopotamia	3:8	8	
Moabites	3:12-14	18	
Canaanites	4:2,3	20	
Midianites	6:1	7	
Ammonites	10:7,8	18	
Philistines	13:1	<u>40</u>	490 years
3) The Temple to the Edict of Artaxerxes			
1 Ki 8:1-46	1095 B.C.		
Neh. 2:1	445 B.C.	560	
Babylonian Captivity		<u>-70</u>	490 years
4) Artaxerxes to the Second Coming			
Artaxerxes to the 1st Advent	483		
"The Sixty Nine Weeks"			
[Church interval]		?	
The Seventieth Week*	<u>-7</u>		490 years

Prophetic Scriptures

- 8,362 predictive verses
- 1,817 predictions
- 737 separate matters

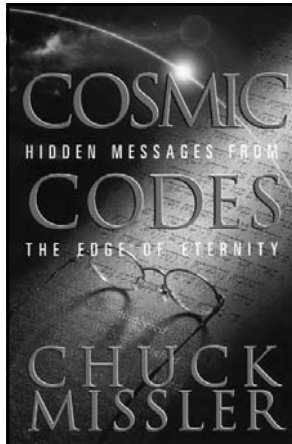
J. Barton Payne, *Encyclopedia of Biblical Prophecy*

Strategic Trends

☉ Weapons of Mass Destruction	Matt 24:22
☉ Rise of Islam	Dan 11
☉ Rise of European Superstate	Dan 2, 7
☉ Rise of China	Isa 49; Rev 19
☉ Biotech & Global Pestilence	Rev 6:8
☉ Struggle for Jerusalem	Zech 12; Luke 21
☉ Magog Invasion	Eze 38, 39
☉ Global Government	Rev 13
☉ Ecumenical Religion	Rev 13, 17, 18
☉ American Challenge	2 Chron 7:14

Cosmic Codes
Audio Session 7 Handouts

Questions from
Cosmic Codes book
Chapter 23



Session 7:

Cosmic Codes

*Hidden Messages
From the Edge of Eternity*

Metacodes

Gravity

- Causes an apple to fall to the ground.
- Keeps our feet on the floor.
- Binds together our Solar System.
- Keeps the Earth and planets in their orbits.
- Prevents the stars from exploding.
- Guides the galaxies in their motions.

Electromagnetic Force

- Holds the atom together.
- Determines the structure of the orbits of the electrons.
- Governs the laws of chemistry.
- Forms include X-rays, radio waves, light.
- Can overcome gravity on Earth.
- Can dominate other forces down to the size of the nucleus of an atom.

Strong Nuclear Force

- Binds together the protons and neutrons in the nucleus of the atom.
- Balance between the strong force and electromagnetic forces limit a nucleus to about 100 protons.
- Energy released substantially greater than electromagnetic (chemical) force.
- Thus, stars shine; essential for life.

Weak Nuclear Force

- Governs atomic instability and radioactivity.
- Disintegration of heavier nuclei.
- Can create heat, such as the decay of radioactive elements in the Earth's core, or in a nuclear power plant.

The Anthropic Principle

- The appearance that the universe was designed for Man.
- In constructing a mathematical model of what we believe we know about the universe, there are hundreds of delicate ratios that, if altered the slightest, would render life impossible.

Gravitational Coupling

- **Stronger:**
 - All stars more massive than our sun by 1.4 times; they burn too rapidly and too inconstantly to maintain life-supporting conditions on surrounding planets.
- **Weaker:**
 - All stars would have less than .8 times the mass of the sun: no heavy elements.

Electromagnetic Coupling

- **Weaker:**
 - Molecules for life cease to exist.
- **Stronger:**
 - Molecules for life cease to exist.

Strong Force Coupling

- If slightly weaker, multi-proton nuclei would not hold together: hydrogen would be the only element in the universe.
- If slightly stronger, nuclear particles would tend to bond together more frequently and more firmly: hydrogen would be rare in the universe, and the supply of various life-essential elements heavier than iron would be insufficient.

Weak Force Coupling

- **Larger:**
 - No helium
 - No heavy elements
- **Weaker:**
 - All helium
 - Over abundance of heavy elements

Ratio of Electron/Proton Mass

- **Larger:**
 - Molecules would not form
 - Life would be impossible
- **Smaller:**
 - Molecules would not form
 - Life would be impossible

Distance from the Sun

- **Closer:**
 - Too warm to maintain a stable water cycle
- **Farther:**
 - Too cold to have one.

Surface Gravity

- **Stronger:**
 - Atmosphere: too much ammonia, methane
- **Weaker:**
 - Atmosphere would lose too much water

Thickness of Earth's Crust

- **Thicker:**
 - Too much oxygen would be transferred from atmosphere to the crust
- **Thinner:**
 - Volcanic and tectonic activity would be too great

Earth's Rotation Period

- **Longer:**
 - Diurnal temperature differences would be too great
- **Shorter:**
 - Atmospheric wind velocities would be too great

Axial Tilt

- **Greater:**
 - Surface temperatures too great
- **Less:**
 - Surface temperature would be too great

Albedo (Reflectivity)

- **Greater:**
 - A runaway ice age would develop
- **Less:**
 - A runaway greenhouse effect would develop

Earth's Magnetic Field

- **Stronger:**
 - Electromagnetic storms would be too severe
- **Weaker:**
 - Inadequate protection from hard stellar radiation

CO₂ and Water Vapor Levels

- **Greater:**
 - A runaway greenhouse effect would develop
- **Less:**
 - The greenhouse effect would be insufficient

Ozone Level

- **Greater:**
 - Surface temperatures would be too low
- **Less:**
 - Surface temperature would be too high
 - Too much UV radiation at the surface

Velocity of Light?

- 17th century: Johannes Kepler, Rene Descartes, et al, believed light was instantaneous (“c” was infinite).
- 1677: Olaf Roemer measured elapsed time between eclipses of Jupiter with its moons, yielding a *finite* speed of light.
- 1729: James Bradley confirmed Roemer’s work.
- Over 300 years, measured 164 times by 16 different methods.

Setterfield-Norman Analysis

- 1677, Roemer, Io eclipse:
 - 307,600 +/- 5400 km/sec
- 1875, Harvard, (same method):
 - 299,921 +/- 13 km/sec
- 1983, National Bureau of Standards, laser:
 - 299,792.4586 +/- 0.00003 km/sec

Properties of Space

- Zero-point energy
 - 10⁹⁵ ergs/cm³
- Permittivity
 - ϵ_0 (absolute dielectric constant)
- Permeability
 - μ_0 (absolute magnetic constant)
- Intrinsic impedance
 - $Z = [\mu_0 / \epsilon_0]^{1/2}$
- Velocity of light
 - At Creation: 2.54×10^{10} times present velocity
 - Currently: Speed of Gravity

The Red Shift of Spectra

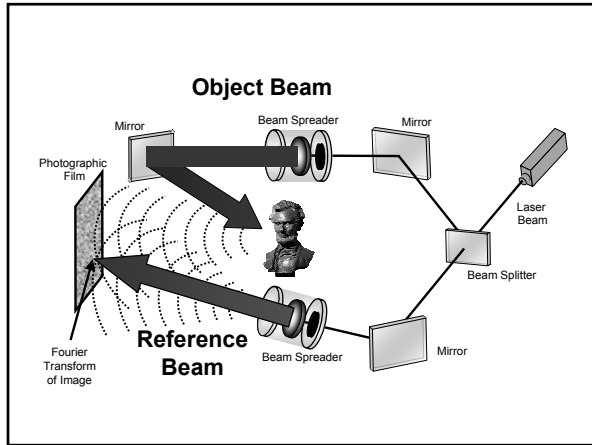
- The Basis of “Hubble’s Law”
- The occurrences of aberrant red shifts
 - Halton Arp
 - William Tiftt
- *Quantization* of red shift data?
 - May be evidence of a change in the property of space: an atomic effect rather than a recessional velocity effect

Hyperspaces

(Spaces of more than 3 dimensions)

- Nachmonides, (13th Century)
 - 10 dimensions
 - only 4 are “knowable”

Commentary on Genesis, 1263
- Particle Physicists, (20th Century)
 - 10 dimensions
 - 4 are directly measurable: (3 spatial + time);
 - 6 are “curled” into less than 10^{-33} cm, and thus inferable only by indirect means



But the word of the LORD was unto them precept upon precept, precept upon precept; line upon line, line upon line; here a little, and there a little...

Isaiah 28:13

Holographic Properties

(Fourier Transform)

- Requires proper illumination
 - Useless in natural light
- Information spread over entire bandwidth
 - No loss from drop outs
 - Resilient to specific interference
 - Anticipates hostile jamming

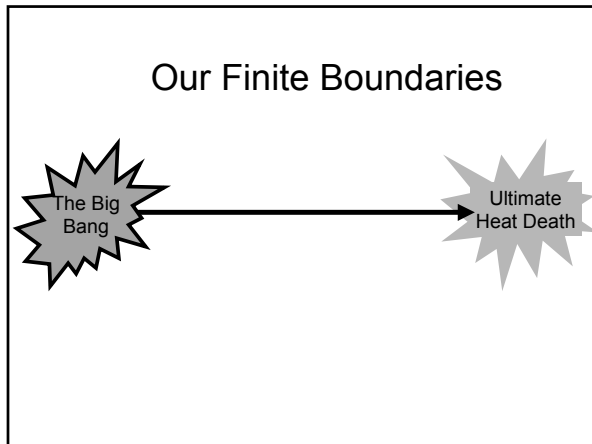
Communications Engineering

- The Bible as a Hologram
 - Fourier Transform Properties
 - Transcendent of Parallax
- Spread-spectrum Design
 - Exploitation of entire bandwidth
 - Immunity to hostile jamming

The “Big Bang” Models

(“First there was Nothing; then it exploded!”)

- Steady State Model
 - Einstein’s Biggest Mistake
- Hesitation Model
 - Refuted in the 1960’s
- Oscillation Model
 - Refuted by entropy laws, lack of mass.
- Inflation Model
 - Requires antigravity forces never observed



Laws of Thermodynamics

- 1st Law: Conservation
Matter and Energy cannot be created or destroyed
("You can't win")
Gen 2:2-3; Heb 4:3-4; Neh 9:6
- 2nd Law: Entropy
All processes involve a loss
("You can't break even")
Ps 103:25,26; Isa 51:6;
Matt 24:35; Rom 8:21

Conservation of Matter/Energy

- *And on the seventh day God ended His work...* *Genesis 2:2-3*
- *The works were finished from the foundation of the world...* *Hebrews 4:3-4*
- *All the things that are therein...you preserve them all.* *Nehemiah 9:6*

The Bondage of Decay

They shall perish... grow old as a garment... Psalm 103:25-26

The earth will grow old like a garment... Isaiah 51:6

Heaven and earth will pass away... Matthew 24:35

Thermal Decay

- Heat always flows from hot bodies to cold bodies.
- If the universe was infinitely old, the temperature throughout the universe would be uniform.
- It isn't; therefore, it isn't infinitely old.
- The universe had a beginning.
- And it is destined for an ending.

Frank J. Tipler

- Professor of Mathematical Physics at Tulane University
 - Astrophysics
 - Information Science
 - Particle Physics
 - Cosmology
 - Global General Relativity

•Mathematical model of the Big Bang and Ultimate Heat Death of the universe

- Came to two conclusions
 - God Exists
 - All life is destined for a resurrection

The Physics of Immortality

The Wave/Particle Duality

- 1906: J. J. Thomson, Nobel Prize for proving electrons were particles.
- 1937: His son was awarded the Nobel Prize for proving electrons were waves.
- The wave/particle duality is the central paradox in quantum physics.
 - There is now compelling evidence that quanta only manifest as particles is when we are looking at them!

Anyone who is not shocked by quantum theory has not understood it.

Niels Bohr, 1885-1962

“I think it is safe to say that no one understands quantum mechanics... in fact, it is often stated of all the theories proposed in this century, the silliest is quantum theory. Some say that the only thing that quantum theory has going for it, in fact, is that it is unquestionably correct.”

Richard Feynman

Non-locality

- 1964: John Stewart Bell, CERN, Geneva, formulated a mathematical approach to demonstrating non-locality: “The Bell Inequality”
- 1982: Alain Aspect, Jean Dalibard, and Gérard Roger at the Institute of Theoretical and Applied Optics, Paris, conducted a landmark experiment:
 - **The Two-Particle Experiment**
 - Twin photons from heating cesium atoms with lasers, each traveled in opposite directions through 6.5 meters of pipe to special polarization analyzers.
 - Filters switched in 10 nanoseconds, 30 nanoseconds /less than the 13 meters of travel between them.
- Photons *did* demonstrate non-locality.

The Holographic Universe

- David Bohm’s Model
 - Explicate (Enfolded Order):
 - tangible everyday physical reality
 - Implicate (Unfolded) Order:
 - More primary, deeper, underlying reality
- Sympathetic Support:
 - Roger Penrose of Oxford
 - the creator of the modern theory of black holes;
 - Bernard d’Espagnat of the University of Paris
 - Leading authorities on foundations of quantum theory
 - Brian Josephson of University of Cambridge
 - Winner of the 1973 Nobel Prize in physics.

Boundaries of Reality

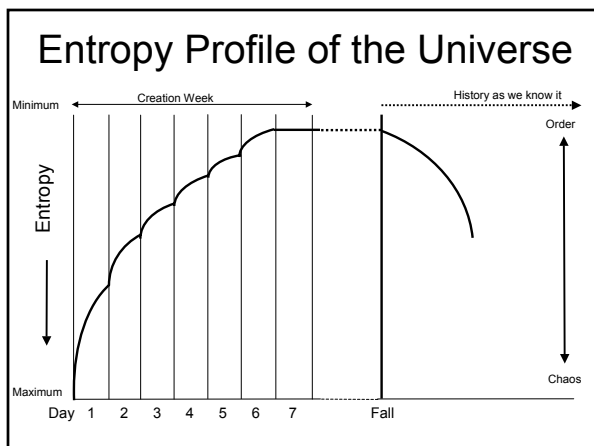
- Two Mathematical Conceptions that go beyond our physical reality:
 - Infinity
 - Finite Universe: Cosmos *not* infinite
 - Finite Universe: Quantum Physics
 - Length, Mass, Time = *Quantized* (digital)
 - Randomness
 - Chaos Theory

The lot is cast into the lap; but the whole disposing thereof is of the LORD.
 Proverbs 16:33

“God does not play dice.”
 Albert Einstein
(If He did, He'd win.)

Velocity of Light?

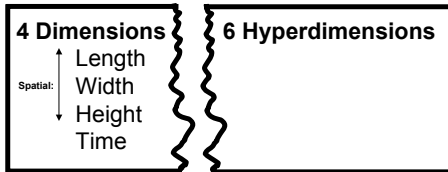
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- 1729: James Bradley confirmed Roemer’s work.
- Over 300 years, measured 164 times by 16 different methods.



10 Dimensional Universe

**The Original
Creation**

10 Dimensional Universe



“Physical”

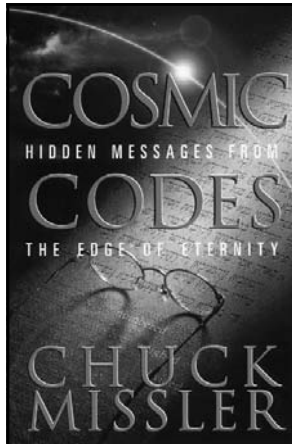
“Spiritual?”

Effects of the Fall?

- Entropy (the “Bondage of Decay”) introduced?
- Universe “fractured?”
 - Separation of the 4 & 6 dimensions?
 - Separation of the “spiritual” and “physical”?
- Redemption involves more than Man alone:
 - “...a New Heavens and a New Earth”

Cosmic Codes
Audio Session 8 Handouts

Questions from
Cosmic Codes book
Chapters 21-22 and 25



Session 8:

Cosmic Codes

*Hidden Messages
From the Edge of Eternity*

Metacodes

A Watch versus the Wrist

Watch = simple open loop system

Wrist:

- Complex closed loop servo system
- Adapts to ambient conditions
- Fights off invaders
- Self-repairing

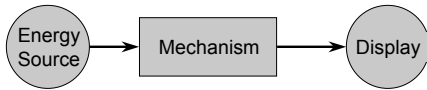
Modern Science

- Modern microbiology has revealed that even the simplest organisms are complex machines beyond our imagining.
- Science has refuted Hume and totally vindicated Paley.

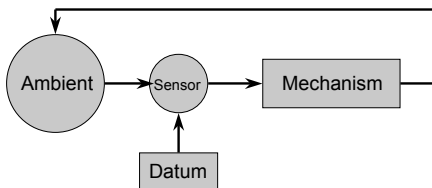
Sir Fred Hoyle, 1981

“The speculation of *The Origin of the Species* turned out to be wrong. It is ironic that the scientific facts throw Darwin out, but leave Paley ...the ultimate winner.”

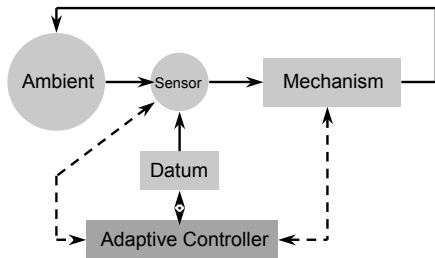
Open Loop System



Closed Loop Systems



Adaptive Systems





Could a camera happen by chance?
How does it compare with the eye?

Evolutionary Fallacies

- Self-organization violates the Law of Entropy (2nd Law of Thermodynamics)
- Complex system assemblies *require all subsystems to be functional* for system survival.

Hierarchy of Design

- Open Loop Systems
- Closed Loop Systems
- Adaptive Systems
- Self-modifying Systems
- Intelligent Machines

Intelligent Machines

- Self-modifying Systems
- Self-programming Systems
- Self-diagnostic Systems
- Self-repairing Systems
- Self-reproducing Systems

The Code of Life: DNA

- 1953: Watson and Crick, *Nature*
 - Deoxyribonucleic acid (DNA)
 - (Ribonucleic acid: RNA)
- 1955: Sanger, complete chemical structure of protein, insulin

Francis Crick

“An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going.”

Michael Denton, 1986

“Although the tiniest bacterial cells are incredibly small, each is in effect a veritable micro-miniaturized factory containing thousands of exquisitely designed pieces of intricate molecular machinery, made up of 100,000,000,000 atoms, far more complicated than any machine built by man and absolutely without parallel in the non-living world.”

The (“Simple?”) Cell

- Unparalleled complexity and adaptive design
- Central memory bank
- Assembly plants and processing units
- Repackaging and Shipping Centers
- Robot machines (protein molecules)
 - 3000 atoms each in 3D configurations
 - Hundreds of thousands of specific types
- Elaborate communication systems with quality control and repair mechanisms

Automated Factories in the Cell

- Robot Machines (hundreds of thousands of different types)
- Artificial languages and decoding systems
- Memory banks for information storage
- Elegant control systems regulating automated assembly of components
- Prefabrication and modular construction
- Error fail-safe and proof-reading devices for quality control

Technology Comparison

- Ford River Rouge Plant, Dearborn Michigan:
 - Raw limestone, iron ore, coal go into one end;
 - Manufactures its own steel, glass, and paint;
 - Its own automated engine manufacturing line;
 - Assembly of mixed models, options, colors;
 - New cars exit the other end . . .
- The cell unequalled in any factory on earth.
- The cell is capable of replicating its entire structure within a matter of a few hours.
 - (All cells derive from previous cells)

The Role of Language

- Semantics
 - “One if by land; two if by sea”
- Syntax
 - The Old North Church...
- Coordinated planning (design) or random accident (chance)?

Digital (Symbolic) Codes

- Digital Codes derive their meaning from arbitrary but consistent definitions (semantics).
- Digital codes are dependent upon their context (syntax).
- Digital codes evidence *design*.

Coding Structures

- Simplex Alphabets
- Error-Detecting Codes
- Error-Correcting Codes
- Adaptive Coding Schema
 - Syntax-modifying codes

The DNA Code

- 3-out-of-4 error-correcting self-replicating code
- Over 3 *billion* elements defining the manufacture and arrangement of hundreds of thousands of devices;
- Consisting of unique assemblies
 - selected from over 200 proteins;
 - each involving 3,000 atoms in 3-dimensional configurations,
 - all defined from an alphabet of 20 amino acids,

Amino Acids

Hydrophobic (Non-soluble)

Hydrophilic (Soluble)

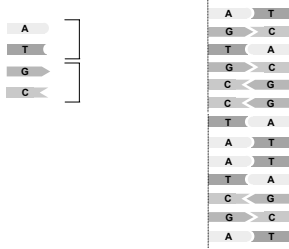
Nonpolar

Polar

- Phenylalanine
- Leucine
- Isoleucine
- Methionine
- Valine
- Proline
- Alanine
- Cysteine
- Tryptophan
- Glycine

- Glutamine
- Asparagine
- Serine
- Threonine
- Tyrosine
- Lysine
- Histidine
- Arginine
- Aspartic acid
- Glutamic Acid

DNA Replication



Digital Information Flow

DNA (master blueprint)

| transcription

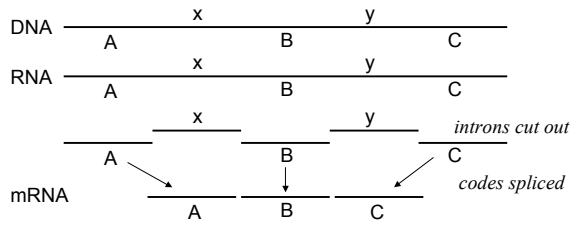
RNA (photocopy)

| translation

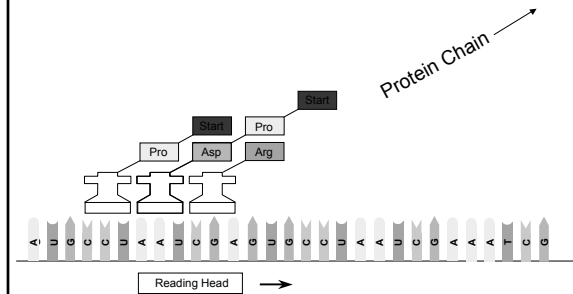
Proteins (functional machines)

(Polypeptides of amino acid chains)

DNA Transcription



Ribosome Processing



Chemical Composition: Hemoglobin

(574 Amino Acids Long)

• Glycine	36	• Tryptophan	4
• Alanine	68	• Cysteine	5
• Serine	31	• Methionine	6
• Tyrosine	30	• Asparagine	47
• Proline	25	• Glutamine	29
• Valine	56	• Arginine	12
• Isoleucine	1	• Histidine	32
• Leucine	69	• Lysine	43
• Phenylalanine	28	• Amide N*	<u>38</u>
• Threonine	14		574

*includes Aspartic & Glutamic acids

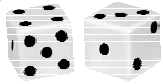
Specificity

- Formula for linear arrangements,
$$N = n! / (p! \times q! \times r! \dots)$$
- 10^{650} permutations possible
- Only *one* of them is hemoglobin
(change just one of them?
= Hemoglobin Opathy)



Impossibility of “Chance”

- Only 10^{18} seconds in the history of the universe
- Only 10^{66} atoms in our entire galaxy
- Only 10^{80} particles in our entire galaxy
- Probabilities $< 10^{-50}$ defines “absurd”
- Specificity $\sim 10^{-650}$ far beyond “chance”
- = equal to winning the lottery
every day for 90 days in a row!



The Human Brain

- Contains 10^{10} nerve cells
- $10^4 - 10^5$ connecting fibers
- Approaches 10^{15} connections
- For comparison: A forest $\frac{1}{2}$ the size of the entire United States, about 1 million sq. miles
 - 10,000 trees per sq. mile
 - 100,000 leaves per tree

The Human Brain

- How does the brain map it's memories?
- In the 1920's, Canadian neurosurgeon Wilder Penfield published *The Mystery of the Mind* concluding specific memories had specific locations in the brain
- Karl Pribram, Stanford University neurophysiologist wrote in his book *Languages of the Brain* that memories were *not* localized
- Indiana University biologist Paul Pietsch set out to disprove Pribram's theories – conducted over 700 operations on salamanders – confirmed memories are *not* localized.

The Human Brain

- Physicist and mathematician John von Neumann estimated over the course of the Human lifetime the brain stores 2.8×10^{20} bits of information
- 1000 bits per second for *10 Billion years!*
- Over a century ago, Hermann von Helmholtz showed that the ear was a frequency analyzer
- Russell and Karen DeValois discovered that the visual cortex processes pattern recognition.
- The models that the brain uses are holographic

The Human Brain

- Internal realities
 - anger, hunger, love, etc.
- External realities
 - warmth of the sun, smell of bread baking, etc.
- How does it discern between the two?
- Maybe not a storage unit at all, but a transfer machine!

Technology of the Resurrection

- All atoms are fungible material
- All that is required: information
 - DNA + ?
 - *Jurassic Park* example

Tangle-free Handling?

- Equivalent to two strands of monofilament fishing line 125 miles long, stored inside a basketball;
- Unzipped, copied, and restored on spools (at 3 times the speed of an airplane propeller), *without tangling!*

Software vs. Hardware

- Hardware is the environment in which the software performs
- Software has no mass
- Time is a physical property that varies with gravity, acceleration and mass
- Something that has no mass has *no time*
- The real you is software not hardware – and it's eternal!

Discussion Questions for Small Group Leaders

Cosmic Codes

Chapter 1—Secret Codes

- 1) What role might cryptography play in protecting privacy today?
- 2) How does the advent of the Internet impact the Body of Christ?
- 3) Which tools might prove productive for Christian leadership (and why)?
- 4) Do the Bible and Science agree? If not, why not?
- 5) Which fulfilled prophecies of the past are most impressive to you?

Chapter 2—Paracryptology: Codes From Other Worlds

- 1) Is there life in another galaxy somewhere? If so, is it sinless? Or sinful?
- 2) Discuss the paradox between the search for intelligent information from outer space and the attribution to unaided chance in the design of living things.
- 3) How do the information discoveries of microbiology (the DNA codes, et al.) imply the existence of a Master Designer?

Chapter 3—Basic Discoveries

- 1) In what way does the Bible anticipate our current discoveries regarding the nature of hyperspaces?
- 2) Why do some scientists suspect that the entire universe, as we know it, is some kind of synthetic simulation; a subset of any ultimate reality?
- 3) What are the implications of finding encryptions in the Biblical texts?

Chapter 4—The First Cryptanalyst

- 1) In what way is the current city of Babylon (55 miles south of Baghdad) significant today? What can we expect to happen in the future?
- 2) Where will the capital of the Antichrist be?

Chapter 5—A Hidden Message

- 1) Was the Flood of Noah *expected*?
- 2) What are the (several) implications which can be inferred from this listing names?
- 3) What are the *hermeneutical* implications, if any?

Chapter 6—Hidden Acrostics

- 1) What is the significance of the names of God *hidden* in the Book of Esther?
- 2) What was Pilate's motive in using an acrostic? Was it deliberate? If so, why?

Chapter 7—The Magic of Sevens

- 1) Was the design of the genealogy in Matthew 1 deliberate? If so, why?
- 2) Who composed the last 12 verses of Mark? Are the linguistic characteristics incidental?
- 3) Why is seven so prevalent in the Scriptures?
- 4) What are the implications, if any, of the *unique* (not used elsewhere) words in each of the Gospels?

Chapter 8—The Hebrew Alphabet

- 1) What is the *hermeneutical* significance of Matthew 5:17-18?
- 2) How do the Ch' in characters imply concerning the origin and early history of the Sinites?
- 3) What are the significances of the *non-connected aleph-tau's* in the *Tenakh*?

Chapter 9—An Assassination Predicted?

- 1) What are the implications, if any, of Genesis 15:17 to the assassination of Itzhak Rabin?
- 2) If the application is valid, what does that imply concerning our foreign policies in the Middle East, particularly with regard to the Land of Israel?
- 3) Did Judas have free will in the betrayal of Jesus Christ? Since it was prophesied (Psalm 41:9), wasn't it predestinated?

Chapter 10—The Skipping of Letters

- 1) What are the dangers of mysticism, particularly regarding the Biblical texts?
- 2) Are the skipping of letters significant? Why? Discuss the distinctions between divination and authentication.
- 3) In Genesis 38 (cf. Appendix H), how did Moses know about David's genealogy five generations in advance?
- 4) Are cryptographic evidences now joining the other sciences in rebutting the skeptics regarding the origin and characteristics of the Biblical text?

Chapter 11—The Torah Codes

- 1) Contrast the use of "codes" for authentication versus divination.
- 2) Is this phenomena of "word play" an incidental characteristic of Hebrew or was it designed for this purpose?
- 3) Are the ELS codes real? What are the dangers?

Chapter 12—The Yeshua Codes

- 1) Are the ELSs real, or valid?
- 2) How do the characteristics of Hebrew, Greek, and English contrast as environments within which to employ word games, encryptions, and the like?
- 3) How does Type I and Type II error analysis impact apologetics and evangelism?

Chapter 13—The Dark Side

- 1) Are all things in the Bible to be understood by everyone?
- 2) How do the ELSs and other forms of Biblical encryption (Proverbs 25:2) reconciled with God's commitment to openness as expressed in Luke 10:21, 1 Corinthians 1:26-29, etc.?

- 3) What are the dangers of dabbling in the occult?

Chapter 14—The Use of Macrocodes

- 1) Did Abraham know he was acting out a prophecy?
- 2) How do rhetorical devices compound translational difficulties and challenges?
- 3) How do macrocodes improve the “signal-to-noise” levels?

Chapter 15—Cosmic Macrocodes

- 1) Is the plan of God revealed in the signs of the *Mazzeroth*? From the virgin birth to the triumph of the Lion of tribe of Judah?
- 2) In what ways do the four faces of the Cherubim reflect the four Gospels?
- 3) What are the fallacies implied by the study of astrology?
- 4) Why was Christ born of a virgin?

Chapter 16—Measuring Confidence

- 1) Give examples of Type I and Type II errors in apologetic issues.
- 2) How certain are *you* that Jesus Christ is, indeed, the Kinsman-Redeemer and Messiah of Israel?

Chapter 17—The 70 Weeks

- 1) How is this passage useful *apologetically*?
- 2) Where is the church alluded to in Daniel 9?
- 3) Are we actually approaching a period about which the Bible says more than it does about any other previous period of history?
- 4) Is the “Prince that shall come” alive today? Can we know who he is? When will he be revealed?

Chapter 18—The Once and Future Calendar

- 1) Should Christians observe any of these feasts? Why?
- 2) Is the Rapture portrayed in any of these feasts? Would you expect it to be?
- 3) In what ways was the career of Enoch prophetic?

Chapter 19—The Apocalypse Codes

- 1) What are the special blessings of this particular book?
- 2) Who are the Two Witnesses in Revelation 11?
- 3) Will the church go through the “Great Tribulation”?

Chapter 20—On the Fringe

- 1) Is gematria valid? If so, for what?
- 2) What is the significance of finding δ and e in the Bible?
- 3) What is the significance, if any, that the six Roman numerals total to 666?

Chapter 21—Advanced Design Considerations

- 1) Discuss each of these communication techniques—and any others—as they are found in the Bible.

Chapter 22—The Code of Life

- 1) How can an evolutionist explain the origin of *information*?
- 2) How did an error-correcting code happen by random chance?
- 3) Who coordinates the mitosis that brings about an embryo? Where is the conflict resolution logic that determines which cells become which kind of tissue, etc.? What controls the architecture of the whole being?

Chapter 23—Our Digital Universe

- 1) Discuss the various upheavals in the fields of science and how they impact our Biblical perspectives.

Chapter 24—Your Personal Adventure

- 1) We are commanded to “be not deceived.” How? What are the tools one can (and must) use to prevent “being deceived”?
- 2) How can “the whole counsel of God” be the ultimate refuge for the pale of excessively restrictive context?
- 3) Will the church go through the “Great Tribulation”?
- 4) Compare personal experiences with the circumstances suggested in keeping a “personal log book.”

Chapter 25—The Ultimate Code: You

- 1) What has been the most valuable aspect of this course of study?
- 2) How has this study impacted *your* life?

Cosmic Codes Appendices: F - I

The following appendices are found in the paperback edition of *Cosmic Codes*. For those who may be using the hardcover edition of *Cosmic Codes*, we've reprinted these new appendices for your convenience.

Appendix F: The Last 12 Verses of Mark

There has been much controversy over the final 12 verses of the Gospel of Mark. Were these verses added by some scribe later (as many Bible have annotated)? Or were they deletions from earlier manuscripts? Behind this dispute lies some astonishing discoveries of profound significance.

The oldest existing manuscripts of the Greek New Testament text are three that had their origins in Alexandria in the 4th and 5th centuries.¹ Since they are the oldest complete manuscripts (in our present possession), many regard them as having an eclipsing authority. There are a number of passages that do *not* appear in these Alexandrian manuscripts, and therein lies an intense ecclesiastical debate.

Textus Receptus

At the end of the 3rd century, Lucian of Antioch compiled a Greek text that achieved considerable popularity and became the dominant text throughout Christendom. It was produced prior to the Diocletian persecution (~303), during which many copies of the New Testament were confiscated and destroyed. After Constantine came to power, the Lucian text was propagated by bishops going out from the Antiochan school throughout the eastern world, and it soon became the standard text of the Eastern church, forming the basis of the Byzantine text.

From the 6th to the 14th century, the great majority of New Testament manuscripts were produced in Byzantium, in Greek. It was in 1525 that Erasmus, using five or six Byzantine manuscripts dating from the 10th to the 13th centuries, compiled the first Greek text to be produced on a printing press, subsequently known as *Textus Receptus* ("Received Text"). The translators of the King James Version had over 5,000 manuscripts available to them, but they leaned most heavily on the major Byzantine manuscripts, particularly *Textus Receptus*.

Textus Receptus Dethroned

Brooke Foss Westcott and Fenton John Anthony Hort were Anglican churchmen who had contempt for the *Textus Receptus* and began a work in 1853 that resulted, after 28 years, in a Greek New Testament based on the earlier Alexandrian manuscripts. Both men were strongly influenced by Origen and others who denied the deity of Jesus Christ and embraced the prevalent Gnostic heresies of the period. There are over 3,000 contradictions in the four gospels alone between these manuscripts. They deviated from the traditional Greek text in 8,413 places. They conspired to influence the committee that produced *The New Testament in the Original Greek* (1881 revision) and, thus, their work has been a major influence on most modern translations, dethroning the *Textus Receptus*.

Detractors of the traditional *King James Version* regard the Westcott and Hort as a more academically acceptable literary source for guidance than the venerated *Textus Receptus*. They argue that the disputed passages were added later as scribal errors or amendments. Defenders of the *Textus Receptus* attack Westcott and Hort (and the Alexandrian manuscripts) as having expurgated many passages, noting that these disputed passages underscore the deity of Christ, His atonement, His resurrection, and other key doctrines. They note that Alexandria was a major headquarters for the Gnostics, heretical sects that had begun to emerge even while John was still alive.²

(It is also evident that Westcott and Hort were *not* believers and opposed taking the Bible literally concerning the atonement, salvation, etc. If you read their personal writings you wouldn't dream of letting them lead your Sunday School class!)³

The Last 12 Verses of Mark

Among the disputed passages are the final verses of the Gospel of Mark (16:9-20). (Look in your own Bible: you are likely to find an annotation that these were "added later.") The insistence that Mark's Gospel ends at 16:8

leaves the women afraid and fails to record the resurrection, Christ's final instructions, and the ascension. It is understandable why these verses were an embarrassment to the Gnostics, and why Westcott and Hort would advocate their exclusion and insist that they were "added later."

However, it seems that Irenaeus in 150 A.D., and also Hypolytus in the 2nd century, each quote from these disputed verses, so the documentary evidence is that they were *deleted* later in the Alexandrian texts, not added subsequently. But there is even more astonishing evidence for their original inclusion that is also profoundly instructive for broader reasons.

The Fingerprints of the Author

Let's examine these verses and explore their underlying *design*. Just as we encounter fingerprint or retinal scanners to verify an identity in today's technological environment, it seems that there is an astonishingly equivalent "fingerprint" hidden beneath the Biblical text that is still visible today, despite the veil of the centuries. (Fasten your seat belts!)

Heptadic Structure of Scripture

Everyone who explores their Bible quickly discovers the pervasiveness of "seven": there are over 600 explicit occurrences of "sevens" throughout both the Old and New Testaments. As we pointed out in chapter 7 (naturally), there are also prevalent evidences of design hidden behind the text.⁴ The "Heptadic" (sevenfold) structure of the Biblical text is one of the remarkable characteristics of its authenticity. What about these disputed 12 verses?

There are 175 (7 x 25) words in the Greek text of Mark 16:9-20. Curious. These words use a total vocabulary of 98 different words (7 x 14), also an exact multiple of seven. That's also rather striking.

Try constructing a passage in which *both* the total number of words *and* the number of unique words (vocabulary list) are precisely divisible by seven (with no remainder)! The random chance of a number being precisely divisible by 7 is one chance in seven. In seven tries, there will be an average of six failures.

The chance of *two* numbers both being divisible by 7 exactly is one in 72, or one in 49. (This is a convenient simplification; some mathematical statisticians would argue the chance is one in 91.⁵) This might still be viewed as an accidental occurrence, or the casual contrivance of a clever scribe. But let's look further. The number of letters in this passage is 553, also a precise multiple of seven (7 x 79). This is getting a bit more tricky. The chance of *three* numbers accidentally being precisely divisible by seven is one in 73, or one in 343. This increasingly appears to be suspiciously deliberate.

In fact, the number of vowels is 294 (7 x 42); and the number of consonants is 259 (7 x 37). Do you sense that someone has gone through a lot of trouble to hide a design or signature behind this text?

As we examine the vocabulary of those 98 (7 x 14) words: 84 (7 x 12) are found before in Mark; 14 (7 x 2) are found only here; 42 (7 x 6) are found in the Lord's address (vv.15-18); and 56 (7 x 8) are not part of His vocabulary there.

This is, conspicuously, *not* random chance at work, but highly skillful design. But just *how* skillful?

With ten such heptadic features, it would take 710, or 282,475,249 attempts for these to occur by chance alone. How long would it take the composer to redraft an alternative attempt to obtain the result he was looking for? If he could accomplish each attempt in only 10 minutes, working 8 hours a day, 40 hours a week, 50 weeks a year, these would take him over 23,540 years!

But there's more. The total word forms in the passage are 133 (7 x 19); 112 of them (7 x 16) occur only once, leaving 21 (7 x 3) of them occurring more than once. In fact, these occur 63 (7 x 9) times.

If we examine more closely the 175 words (7 x 25), we discover that 56 (7 x 8) words appear in the address of the Lord and 119 (7 x 17) appear in the rest of the passage.

The natural divisions of the passage would be the appearance to Mary, verses 9-11; His subsequent appearances, verses 12-14; Christ's discourse, verses 15-18; and the conclusion in verses 19-20. We discover that verses 9-11 involve 35 words (7 x 5). Verses 12-18, 105 (7 x 15) words; verse 12 and 14 (7 x 2) words; verses 13-15, 35 (7 x 5) words; verses 16-18, 56 (7 x 8) words. The conclusion, verses 19-20, contains 35 (7 x 5) words.

It gets worse. Greek, like Hebrew, has assigned numerical values to each letter of its alphabet. Thus, each word also has a numerical (“gematrical”) value (see Figure 20-1 on page 287 of *Cosmic Codes*).

The total numerical value of the passage is 103,656 (7 x 14,808). The value of v. 9 is 11,795 (7 x 1,685); v. 10 is 5,418 (7 x 774); v. 11 is 11,795 (7 x 1,685); vv. 12-20, 86,450 (7 x 12,350). In verse 10, the first word is 98 (7 x 14), the middle word is 4,529 (7 x 647), and the last word is 791 (7 x 113). The value of the total word forms is 89,663 (7 x 12,809). And so on.

Individual words also tell a tale. *θανάσιμος*, *deadly* (v.18), is not found elsewhere in the New Testament. It has a numerical value of 581 (7 x 83), and is preceded in the vocabulary list by 42 (7 x 6) words, and in the passage itself by 126 (7 x 18) words.

This all is among the legendary results of the work by Dr. Ivan Panin (reviewed in chapter 7). In fact, he identified 75 heptadic features of the last 12 verses of Mark.⁶ We have highlighted only 34 heptadic features. If a supercomputer could be programmed to attempt 400 million attempts/second, working day and night, it would take one million of them over four million years to identify a combination of 734 heptadic features by unaided chance alone.⁷

Authentication Codes

Just as we encounter coding devices in our high-technology environments, here we have an automatic security system that monitors every letter of every word, that never rusts or wears out, and has remained in service for almost two thousand years! It is a signature that can’t be erased and which counterfeiters can’t simulate.

Why are we surprised? God has declared that He “has magnified His word even above His name!” (Psalm 138:2). We can, indeed, have confidence that, in fact, the Bible is God’s Holy Word, despite the errors man has introduced and the abuse it has suffered throughout the centuries. It is our most precious possession—individually as well as collectively. And it never ceases to unveil surprises to anyone that diligently inquires into it.

Notes (7, naturally):

1. *Codex Alexandrinus*: a 5th century manuscript containing the entire New Testament, brought to England in about 1630. *Codex Sinaiticus*, discovered in St. Catherine’s Monastery at (the traditional) Mt. Sinai, has been dated around 350 A.D. *Codex Vaticanus*, dated about 325 A.D., had been in the Vatican Library since at least 1481, but was not made available to scholars until the middle of the 19th century.
2. 1 John 1:1, 4:2, 3; et al.
3. For a sampling of their correspondence, etc., see our Briefing Package, *How We Got Our Bible*, from which this article was excerpted.
4. The discussion in chapter 4 on Matthew 1:1-11 should be reviewed in connection with this article.
5. Actually, it can be mathematically argued that it is 91. $p = 1/7 * [(n-1)/(7n-1)] * [(n-2)/(7n-2)] * \dots * [1/(7n-(n-1))]$ is far more restrictive than the assumptions here.
6. Ivan Panin, *The Last Twelve Verses of Mark*, B-761, Bible Numerics, John W. Irwin, 81 Bayview Ridge, Toronto, Ontario, M2L 1E3, (416) 445-3243 ph/ (416) 445-4069 fax
7. $7^{34} = \sim 5.4 \times 10^{28}$ tries needed. There are 3.15×10^7 sec/year; at 4×10^8 tries/sec, it would take about 4.3×10^{12} computer-years.

Appendix G: The Mathematics of Beauty

It may come as a surprise to discover that there does exist a “mathematics of beauty.” Most of us assume that the rigors of mathematics, however elegant, are relegated to some kind of antithesis to “beauty,” which is, ultimately, deemed to be purely subjective. Not only does it appear that there is a strange brand of mathematical observations that are labeled thus, but they may well be fingerprints of the Creator Himself!



Leonardo da Pisa

Regarded as the “greatest European mathematician of the Middle Ages,” his name was Filius Bonacci (“son of Bonacci”), shortened to Fibonacci. He was born in Pisa, Italy, the city with the famous Leaning Tower, in about a.d. 1175. He was one of the first people to introduce the Hindu-Arabic number system—the positional system we use today based on ten digits with its decimal point and a symbol for zero—into Europe. His book on “how to do arithmetic in the decimal system,” *Liber abbaci* (meaning Book of the Abacus or Book of Calculating), completed in 1202, persuaded many European mathematicians of his day to use this “new” system.

But his book also discussed a hypothetical problem of rabbit populations that introduced a sequence of numbers that has come to be known as the “Fibonacci sequence,” where each succeeding number is the sum of the preceding two: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, etc. Several hundred years would pass before the extent and significance of this sequence would be recognized in nature.¹

The Golden Rectangle

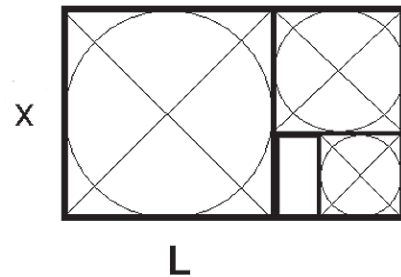
Inherent in the Fibonacci numbers is the “golden proportion,” sometimes designated as ϕ . The ratio between each pair of numbers will always approximate 1.618, which in turn, approximates the value of $(1 + \sqrt{5})/2$. This ratio is only true for this sequence of numbers.

This ratio also defines a rectangle that has become known as the “Golden Rectangle,” in which the longer side is to the shorter side as the sum of the two sides is to the longer side. If the short side is x , the long side will be $1.618x$. Mathematically, $L/x = (x+L)/L$ (see graphic, right).

The Golden Rectangle is widely regarded as the most beautiful and satisfying to the human eye. Phideas, the Greek sculptor, and many others in ancient Greece and Egypt used this ratio in their works of art and architecture. Artists such as Leonardo da Vinci, Van Gogh, Vermeer, John Singer Sargent, Monet, Whistler, Renoir, Mary Cassatt, Giotto, Durer, and others employed the Golden Rectangle in their works of art. In contrast to static symmetry, the dynamic symmetry of the golden proportion yields growth, power, movement, and life to an artist’s work. This pleasant rectangular shape was used in designing the Parthenon in Greece, the Great Pyramid in Egypt and the United Nations building.

(The Great Pyramid is based upon ϕ , with π derived as a by-product since $\pi = 4/\sqrt{\phi}$).

The Golden Rectangle is still found in numerous pictures, doorways, windows, statues, credit cards, playing cards, postcards, light switch plates, writing pads, 3-by-5 and 5-by-8 index cards, etc. Advertisers rely on its more attractive shape, more than any other, to appeal to potential buyers.



The Golden Spiral

The Golden Rectangle has the unusual property that if you cut off a square from one end, the remaining rectangle is also a golden rectangle: the ratios remain the same. Continuing this process leads to a nested sequence of golden rectangles, a “Golden Spiral,” fitting perfectly. It produces an angular, logarithmic growth pattern whose ratio of growth is such that its shape does not change as it gets larger. This is commonly observed in shells, of which *Nautilus Pompilius*, the chambered nautilus, is the best example.

This spiral is visible in things as diverse as hurricanes, spiral seeds, the cochlea of the human ear, a ram’s horn, the tail of a sea-horse, growing fern leaves, the



DNA molecule, waves breaking on the beach, tornadoes, galaxies, the tail of a comet as it winds around the sun, whirlpools, seed patterns of sunflowers, daisies, and dandelions, and the construction of the ears of all mammals.

The growth pattern of the seeds of the sunflower form two spirals, one clockwise and the other counterclockwise. The number of spirals in each direction are adjacent Fibonacci numbers, usually 55 and 89, 89 and 144, or 144 and 233.

Phyllotaxis

The study of the order and functionality of the spiral arrangement of leaves around a plant's stem is called *phyllotaxis*. This spiral pattern is observed by viewing the stem from directly above, and noting the arc of the stem from one leaf base to the next, and the fraction of the stem circumference which is inscribed. *In each case the numbers are Fibonacci numbers.* In the elm, the arc is 1/2 the circumference; in beech and hazel, 1/3; apricot and oak, 2/5; in pear and poplar, 3/8; in almond and pussy willow, 5/13; and in some pines either 5/21 or 13/34. (Palms bearing 4, 6, 7, 9, 10, 11, or 12 leaves are not known.) In studying 434 species among *angiospermae* and 44 species among *gymnospermae*, the spiral arrangement numbers all fall in the Fibonacci sequence.

Why? These patterns assure that each leaf will receive its maximum exposure to sunlight and air without shading or crowding from other leaves.

Not only do we discover this pattern in leaf arrangements, but we also consistently find this arrangement in flower petals: a lily and an iris have 3 petals; yellow violet, buttercup, and larkspur, 5; delphinium, 8; mayweed, corn marigold, and ragwort, 13; aster, chicory, and doricum, 21; pyrethrum, 34; helenium, 55; and michaelmas daisy, 89. The rows of bracts counted on pinecones and pineapples exhibit Fibonacci numbers: on pine cones there are two rows to count, 8 and 13. On a pineapple, there are three rows: 8, 13, and 21.

Musical Scales

Notice the piano keyboard and its relationship to the Fibonacci numbers and beauty in music: The black keys are in groups of 2 and 3, the Pentatonic scale. An octave is composed of 8 white keys, the Diatonic scale. The 8 white and 5 black keys, 13 all together, make up the Chromatic scale. These are all Fibonacci numbers: 2, 3, 5, 8, and 13 (see figure at right).

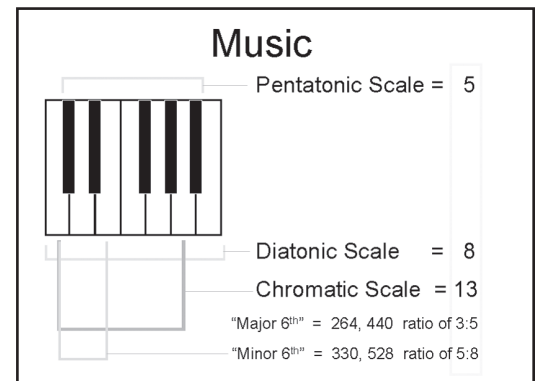
Most musicians regard the major and minor sixths as the most beautiful chords found in music. The major sixth (consisting of C and A) have vibrations per second of 264 and 440 respectively, which is a ratio of 3:5. A minor sixth (consisting of E and high C) have vibrations of 330 and 528 vibrations per second respectively, which is a ratio of 5:8. All of these are Fibonacci ratios.

Musicians such as Bach, Beethoven, Bartok and others would divide musical time into periods based on the same ("golden") proportion to determine the beginnings and endings of themes, moods, texture, etc. These proportions not only look good to the eye and sound good to the ear, but also "feel right aesthetically," are exact mathematically, and appear to be ubiquitous.

Galactic Order

These observations transcend biology alone. A great number of the galaxies are in a spiral configuration. In our own planetary system, the period of each planet's revolution around the sun (in round numbers), beginning with Neptune and moving in, are in ratios of the Fibonacci numbers: 1/2, 1/3, 2/5, 3/8, 5/13, 8/21, 13/34.² In planets with more than one moon, there is a Fibonacci correlation in the distances from the moons to the host planet.

It is deeply significant that the same design paradigms are seen in the telescope as well as the microscope. The "fingerprints" of the Designer are His signature and they appear everywhere throughout the universe.



An Inescapable Perspective

Why are flowers beautiful? (Bees are colorblind.) Why are corals and creatures in the deepest (darkest) part of the ocean colored? With no light, they can't be seen. (Only the Designer Himself can enjoy them as His private amusement.) To attribute phyllotaxis and similar results to unaided random chance in an attempt to deny the entropy laws is to fly in the face of empirical reality. Blindness to the elegance of design in the universe is, indeed, intentional and "willingly ignorant," as Peter reminds us.³

It takes knowledge and wisdom of the highest order to produce such related phenomena. Penetrate nature wherever the scientist may, and he will find that thought has been there before him. And the creation itself is sufficient to hold us accountable, Paul reminds us.⁴ So, as John exhorts, "Thou art worthy O Lord, to receive glory and honor and power: for thou hast created all things and for thy pleasure they are and were created." (Revelation 4:11)

Notes:

1. Much of this article was excerpted from Frederick Wilson, "The Ubiquity of the Divine (Golden) Ratio and Fibonacci Numbers Throughout the Heavens and the Earth," *Proceedings of the Fifth International Conference on Creationism*, August 4-9, 2003, Creation Science Fellowship, Pittsburgh PA, 2003. There are also numerous sites on the Internet devoted to various aspects of the Fibonacci numbers. (There are even sites that list all the other sites, etc.)
2. Wilson, p.48.
3. 2 Peter 3:5.
4. Romans 1:20ff.

Appendix H: Hidden Genealogy in Genesis 38

So often in the Bible we encounter genealogies which, to most of us, aren't particularly exciting reading. And yet they often contain hidden treasures to reward the diligent, as we highlighted in chapters 5, 7, and 15. And yet there are many others...

The Book of Ruth

In the Book of Ruth, the joyous climax occurs when Boaz, the Kinsman-Redeemer and the hero of the narrative, redeems the land to Naomi and takes Ruth as his Gentile Bride. In addition to providing us a charming, romantic story, we quickly discover that this brief little book holds numerous insights and background essential to understanding God's broader plan of redemption. (I feel that one cannot really understand Revelation chapter 5 until they have studied this fascinating book.) In the festivities during the wedding celebration of Ruth and Boaz, someone ostensibly toasts, "And let thy house be like the house of Pharez, whom Tamar bare unto Judah, of the seed which the LORD shall give thee of this young woman." (Ruth 4:12) ...an apparent reference to the events of Genesis 38. (However, if you are familiar with that sordid episode, you might have been tempted them to exclaim, "Same to you, fella!") But there's more to the tale.

Judah & Tamar

In Genesis 38, Tamar had married Judah's firstborn son, Er, who died without having any children. Under Mosaic law, Judah was expected to provide Tamar a brother to raise up issue and failed to do so.¹ Tamar then resorted to posing as a prostitute and Judah unknowingly got her pregnant. When confronted with the evidence, he confesses that his sin was greater than hers.²

Tamar gives birth to two sons, Zarah and Pharez. Both are, of course, illegitimate. The Torah instructs that a bastard be cast out of the congregation for 10 generations.³ The strange remark in Ruth 4:12 was, in fact, a *prophecy*: the tenth generation from Pharez was none other than David. And to emphasize this, the book closes with David's genealogy:

“Now these are the generations of Pharez: Pharez begat Hezron, And Hezron begat Ram, and Ram begat Amminadab, And Amminadab begat Nahshon, and Nahshon begat Salmon, And Salmon begat Boaz, and Boaz begat Obed, And Obed begat Jesse, and Jesse begat David.” (Ruth 4: 18-22) The inheritance of David is here prophesied *before the days of Samuel*.⁴ But there’s more.

The Hebrew Text of Genesis 38

One of the reasons that the sordid tale of Judah and Tamar has been included in the Scriptures is because this incident is included in the family tree of the Messiah.⁵ It is interesting that also hidden within the text of Genesis 38, at 49-letter intervals, are the names of Boaz, Ruth, Obed, Jessie, and David—in *chronological order!* (See figure; note that Hebrew goes from right to left, and the names are coded backwards.)

These names anticipate, five generations in advance, the next five generations climaxing in David, a total of ten generations. Here in the *Torah* we find the names of the principals of the Book of Ruth, and a delineation of their descendants leading up to the Royal line. How did Moses know all this centuries before the fact? (We know that Moses himself wrote the *Torah*: Jesus verified that very fact numerous times.⁶)

The presence of such features of the Biblical text is a profound demonstration of its supernatural origin. There is absolutely no way that these details could have been anticipated in advance except by Divine guidance and the control of the most subtle aspects of the recorded text—far outstripping any insights of the authors themselves. In addition to the astonishing specifics themselves, the discovery of these features underscores the confidence we may have in the precision of the text, and the overwhelming implications that it is a skillfully crafted *integrated* message—from Genesis 1 to Revelation 22.

The unfortunate promotional sensationalism by some authors over the “Bible Codes” has caused many conservative scholars, as well as unbelieving skeptics, to disparage—and overlook—the many authentic treasures hidden underneath the Biblical text. Truly, “It is the glory of God to conceal a matter, and the honor of kings to search them out.” (Proverbs 25:2)

Genesis 38

1 וְגֵרָה בְּנֵהּ הָיָה וְרָדָה מֵאֵת אֶהוּי וַיֵּשֶׁב עִירָאִישׁ עֲדֹלָמִי וְשֵׁמוֹ הָיָה
 2 וַיְרֵאֵשׁם יְהוָה וַיְהִי כִּשְׁנֵי וְשָׁנִים שָׁנֵי וַיִּקְרָהוּ וַיִּקְרָא אֵלָיו:
 3 וַתֵּהֵר וַתֵּלֶד בֶּן וַיִּקְרָא אֹתוֹ שֵׁם:
 4 וַתֵּהֵר עֹד וַתֵּלֶד בֶּן וַיִּקְרָא אֹתוֹ שֵׁם:
 5 וַתִּקְרַע עֹד וַתֵּלֶד בֶּן וַיִּקְרָא אֹתוֹ שֵׁם וְהָיָה בְּכֹזֵב בְּלִדְתָהּ אֹתוֹ:
 6 וַיִּקְרַע יְהוָה אֶפֶס לֵעַר בְּכֹזֵב וְשָׁקֵה חֲבֵרָה:
 7 וַיֵּלֶד עֹר בְּכֹזֵב וַיְהִי קֶזֶז בְּעֵלְמִי וַיְהִי וַיִּמְתָּה יְהוָה:
 8 וַיֵּאמֶר עֹד לְאוֹנָן כֹּא אִלְיָשָׁע אֶהְיֶה וַיִּקְרַע אֶתָּה וַיִּקְרַע וְהָיָה לְאוֹנָן:
 9 וַיֵּרֶשׂ אוֹנָן כִּי לֹא לָרָדָה וַיִּשָׁע וַיְהִי אִלְיָשָׁע אֶהְיֶה וַתִּחַר אֶרְצָה
 10 לְבִלְתִּי נִחְרָשׁ לְאֶהְיֶה:
 11 וַיִּקְרַע עֹד וַיְהִי אֶשֶׁר יִשָּׂא עִשָׂה וַיִּבְרַח נְסִימָה:
 12 וַיִּבְרַח חֲנֻמִּים וַיִּקְרַע בְּחִישָׁה אֶשְׁתֵּי־יְהוָה וַיִּקְרַע יְהוָה וַיִּשָּׁע עֲדֹלָמִי עֲנָנִי
 13 הָיָה וַיְהִי רָדָה וְהִלְכִי חֲמֻנָה:
 14 וַיִּגְדַּל לְקָרֵר לְאִמְרָה הֵנָּה חֲמֻנָה עֲלֵיהָ חֲמֻנָה לְקֹדֶם עֲנָנִי:
 15 וַתִּסַּר בְּנֵי אֶלְיָשָׁע חֲמֻנָה וַיִּקְרַע חֲמֻנָה וַתִּשָּׁע וַתִּשָּׁע וַתִּשָּׁע בְּפִתְחָהּ עֲנָנִי:
 16 וַיִּשָּׁע אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע עֲנָנִי:
 17 וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע עֲנָנִי:
 18 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 19 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 20 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 21 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 22 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 23 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 24 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 25 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 26 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 27 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 28 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 29 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי:
 30 וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע אֶתָּה אֶלְיָשָׁע וַיִּשָּׁע חֲמֻנָה וַיִּשָּׁע עֲנָנִי

Boaz בְּעוֹז

Ruth רוּת

Obed עֲבֵד

Jeshay יֵשׂוּי

David דָּוִד

All in 49-letter intervals; &
All in *chronological* order!

Source: This discovery was first highlighted in an article by Daniel Michelson, “Codes in the Torah,” *B’Or Ha’Torah*, Number 6, SHAMIR, Association of Religious Professionals from the Soviet Union and Eastern Europe in Israel, Jerusalem, Israel, 1987.

Notes:

1. Deuteronomy 25:5-10.
2. Genesis 38:26.
3. Deuteronomy 23:2.
4. Ruth 1:1.
5. Matthew 1:1-11; (vv.5, 6).
6. Matthew 8:4; 19:7,8; 23:2; Mark 1:44; 10:3,4; 7:10; Luke 5:14; 16:19, 1; 20:37; 24:27,44; John 3:14; 5:39,45,46; 6:32; 7:19, 22,23.

Appendix I: The Universal Constants: π and e

The recent discovery that the speed of light is *not a constant* has created quite a stir—and rethinking—in both physics and cosmology. (Although the spate of recent articles always fails to credit Barry Setterfield for calling this to our attention over a decade ago!) However, there does appear to be at least two intrinsic constants in the universe: π and e . (They are both non-dimensional and independent of any measuring system: metric, English, et al.)

We all met π (“pi”) in school when we had to deal with the circumference of a circle and similar matters. “Pi are squared” sounds like bad grammar, but it is correct geometry for the area of a circle, πr^2 . We approximated it with $22/7$ until we got into engineering circles where we learned that, more precisely, it was 3.141592654... (It has recently been calculated to a *trillion* decimal places!) As we have previously mentioned in chapter 20, π is also a “hidden treasure” in the Hebrew text of 1st Kings 7:23. When one corrects the letter values for a variation of the spelling, the 46-foot circumference of Solomon’s “molten sea” is specified to an accuracy of better than 15 thousandths of an inch!

Natural Logarithms

Perhaps less well known to most of our less technical readers is the base of Napierian (“natural”) Logarithms, e . Mathematician John Napier (1550-1617) was an activist for the Reformed and Protestant affairs in Scotland and was the inventor of Napierian Logarithms (Log_e). The number e is most commonly defined as the limit of the expression $(1 + 1/n)^n$ as n becomes large without bound. This limiting value is usually approximated by 2.718281828... and shows up in myriads of places in advanced engineering and mathematics, such as:

In wave mechanics,	$X = Ae^{kt}$
Or electrical theory,	$Q(t) = Qe^{-t/RC}$
In advanced math,	$E^{ix} = \text{Cos } x + i\text{Sin } x,$ where $i = \sqrt{-1}$

And the distribution of prime numbers: $A(x) = x/\log_e x$

A Rabbinical Tradition

The ancient Hebrew sages believed, of course, that God created the heavens and the earth. However, some of them even believed that *the Word of God was the very template* with which He did it.

This strikes some of us as simply a colorful exaggeration that goes beyond any direct evidence. But there are hints here and there... There are two well-known references to the creation in the Scripture: Genesis 1:1 and John 1:1. Let’s look “underneath” the text of each of these.

Genesis 1:1

“In the beginning God created the heaven and the earth.” (Genesis 1:1) In Hebrew:

בְּרֵאשִׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ

If you examine the numerical values of each of the Hebrew letters, and the numerical value of the words (for a listing see Figure 20-1 on page 287 in *Cosmic Codes*), and apply them to this formula:

The number of letters x the product of the letters
The number of words x the product of the words

You get 3.1416×10^{17} . The value of π to four decimal places! Hmm.

John 1:1

“In the beginning was the Word, and the Word was with God, and the Word was God.” (John 1:1) In Greek:

Ἐν ἀρχῇ ἦν ὁ λόγος, καὶ ὁ λόγος ἦν πρὸς τὸν Θεόν, καὶ Θεὸς ἦν ὁ λόγος

Here again, if you take the numerical value of each of the Greek letters (see the same chart on page 287 again), and the numerical value of the words, and apply them to the same formula:

The number of letters x the product of the letters
The number of words x the product of the words

You now get 2.7183×10^{65} , the value of e to four decimal places. Curious!

Significance?

Each of these is another of those puzzling, ostensible “coincidences” that is too astonishing to dismiss, and yet presents challenges in suggesting any real significance.² And taken together, they do evoke some far-reaching conjectures. There are, however, at least two problems: why just four decimal places (they both deviate from the fifth place onwards) and what do you do with all the “extra zeroes”? I frankly don’t know. The rabbis would probably suggest that each of these might simply be a remez, a hint of something deeper. Let me know if you have any further suggestions. Meanwhile, let’s continue to praise our awesome Creator and Savior for His marvelous Word!

Notes:

1. In September, 2002, Professor Yasumasa Kanada and nine other researchers at the Information Technology Center at Tokyo University calculated the value for pi, using over 400 hours of a Hitachi supercomputer, to 1.24 trillion decimal places.
2. This was first called to my attention by Dr. David Rosevear, and published by Dr. Peter Bluer, Ph.D., Creation Science Movement, PO Box 888, Portsmouth, PO6 2YD, UK, in November 2001.

Koinonia Institute

Bible Cryptology (BIB 150) 3 credits

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Instructions

For maximum benefit, the student should proceed as follows:

1. Before completing assignments the student should familiarize him/herself with the entire workbook.
2. As unfamiliar words are discovered, they should be listed, looked up in the dictionary, and definitions should be written in the provided space (Glossary of New Terms) for reference. Feel free to add more pages if necessary.
3. All writing assignments must follow the procedures described in *Guidelines for Writing Assignments*, including format and title page.
4. Send completed work (including this workbook and all assignments) at the end of each course to Koinonia Institute for grading. Your graded materials will be returned to you as soon as possible with a sealed envelope containing your final exam(s).
5. Carefully review the materials, all assignments, and your study notes in preparation for your final exam(s).
6. Final exams should remain sealed until all review work is complete. Your study materials, workbook, notes, and assignments must be put away, and you must have an observer to witness the integrity of the final exam. The observer must sign the exam title page at the designated place.
7. Please note that you will receive a separate grade for study questions—both existing ones and the ones you create (25%); research assignments (25%); and, the final exam (50%). These grades will be averaged to determine the final course grade. There is no grade given for the session handouts—use them as you wish to help you complete the study questions and/or assignments.
8. Remember to place your name on everything you send in and retain a copy for your protection.

GRADING SCALE

A = 93-100

B = 85-92

C = 76-84

D = 70-75

F Below 70

Glossary of New Terms

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Multiple-Choice Questions

Assignment: Create three (3) multiple choice questions for each chapter (1-25). Be sure to cover the breadth of the material. Questions will be graded on content, insight and difficulty. Accompany questions/answers with appropriate reference. Use the format example below and be sure to circle the correct answer.

1. _____

A.

B.

C.

D.

Candidate Research Projects

Assignment: Choose five (5) from the list of candidate research projects, including the book report project (below). Follow the procedures found in the *Guidelines for Writing Assignments* for Compositions. You may choose one “list” or “chart” assignment; the other four should be compositions (3 or more pages in length).

Chapter 1: Secret Codes

- 1) Submit book reviews of any of the books listed on the supplemental reading list (or their equivalents).
- 2) Develop an actual use of the Playfair code with a partner, using only manual methods available in a hotel room (no computer or Internet).
- 3) Develop an actual use of PGP with Internet email.
- 4) Investigate the history of ENIGMA, PURPLE, and ULTRA and their role in World War II.
- 5) Explore the role of rabbinical traditions in the evolution of cryptography in the courts of Europe during the Renaissance.

Chapter 2: Paracryptology—Codes From Other Worlds

- 1) Review the CETI Proceedings in terms of their commentary on the Theory of Evolution.
- 2) Review *Alien Encounters* (or an equivalent), on extraterrestrial communication.

Chapter 3: Basic Discoveries

- 1) Explore the role of hyperspaces in our contemporary perspectives.
- 2) Explore the various paradoxes emerging from quantum physics and their implications in understanding our universe.
- 3) Review our commentary on the Days of Creation, Genesis, Chapter 1.

Session 4: The First Cryptanalyst

- 1) Compile examples of transformation encryptions in the Bible.

Chapter 5: A Hidden Message

- 1) Are there other examples where the *meaning* of names is significant?
- 2) Are the various (20?) listings of the names of the 12 tribes significant as well?

Chapter 6: Hidden Acrostics

- 1) What other places are the names of God hidden beneath the text?
- 2) Where is the name of *Yeshua* hidden in the *Tenakh*?

Chapter 7: The Magic of Sevens

- 1) Find (7?) examples of sevens that are *not* included in Appendix D.

Chapter 8: The Hebrew Alphabet

- 1) Make a list of the Hebrew alphabet as it was used prior to the Aramaic square script of today, and their suggestive sememes.
- 2) Compile a list of Hebrew words the meaning of which can be directly inferred from the root characters if viewed in terms of their pre-Babylonian forms rather than the Aramaic square script used today.
- 3) Are there some cosmic fundamentals behind the physics and structure of music and the linguistic features of the Hebrew language? Review Appendix G for some background.

Chapter 9: An Assassination Predicted?

- 1) Is there a correlation between the ostensible judgments upon the United States and its foreign policy toward Israel? Review *Israel: The Blessing and the Curse*, by Bill Koenig and John McTernan.

Chapter 10: The Skipping of Letters

- 1) Trace the history of the mystical traditions to the cryptology of the courts of Medieval Europe to mechanical devices to the modern computer and the rediscovery of those very traditions.

Chapter 11: The Torah Codes

- 1) Have there been any successful discoveries of ELSs in non-Biblical literature?
- 2) Explore the potential of *nonlinear* sequencing of letters as a higher level form of Biblical encryption (or authentication).

Chapter 12: The Yeshua Codes

- 1) Compile a list of *Yeshua* occurrences, with their relevant plaintext clustering relationships.
- 2) Explore the application of mathematical statistics and decision theory (Bayes' Theorem, Design of Experiments, Hypothesis testing tools, etc.) on the evaluation of ELSs in the Scriptures.

Chapter 13: The Dark Side

- 1) Trace the drift of Jewish thought from the rejection of the Messiah and the destruction of the Temple, the Council of Jamnia, the development of the Talmud, and the emergence of the Kabbalah.
- 2) Trace the influence of Jewish mysticism on Gnosticism and other forms of Christian mysticism.
- 3) Explore the use of nonlinear sequences as encryptions similar to *equidistant* letter sequences. If they occur, how would you rebut skeptical criticisms?

Chapter 14: The Use of Macrocodes

- 1) Catalog the more provocative types found in the Bible.
- 2) List the features of the Garden Tomb which fit the specifications found in the Scripture (including the Levitical requirements of a "clean place.")

Chapter 15: Cosmic Macrocodes

- 1) List the 12 signs of the *Mazzeroth* and summarize the concepts (and tribes) associated with each. Include the 3 decans associated with each.

- 2) The original symbol for the tribe of Dan was a serpent (Genesis 49:17). How did it become an eagle? Trace the migrations and vicissitudes of the tribe to the north (Deuteronomy 32:22), to ships (Judges 5:17), and to Europe and beyond. How is this relevant to today? Why are they omitted in the listing of Revelation 7? And where else?

Chapter 16: Measuring Confidence

- 1) What is the effect of applying Bayes' Theorem to our simplistic combinatorial formulations?
- 2) Analyze Daniel 9:25 as if it were a candidate for our sample. What would you're *a priori* estimate be?
- 3) Compile a list of technology statements that anticipated subsequent scientific discoveries unimagined in the time they were written.

Chapter 17: The 70 Weeks

- 1) List the places in the Old Testament which indicate that the Messiah will be killed, executed, or die on our behalf.
- 2) List the 24 allusions to the "interval" of Daniel 9:26 in the Scriptures. How is the number 24 significant?
- 3) Explore (and validate) the four "70 Sevens" which have been suggested in Israel's history.

Chapter 18: The Once and Future Calendar

- 1) Why do some rabbinical authorities believe Enoch was translated on his birthday?
- 2) Was Titus Vespasian a descendant of Antiochus Epiphanes?

Chapter 19: The Apocalypse Codes

- 1) Undertake a detailed study of the Book of Ruth and catalog the prophetic insights found there.
- 2) Undertake a detailed study of the Book of Revelation with our Expository Commentary.
- 3) Compile a list of arguments for, and against, the pretribulational rapture of the church.

Chapter 20: On the Fringe

- 1) Investigate the possible implications of the following numerics: a) 961 as the "signature of God" b) The 153 fishes of John 21 c) 666, The Mark of the Beast d) 888 as indicator pointing to Jesus.

Chapter 21: Advanced Design Considerations

- 1) Enumerate the various ways God has *authenticated* His message to us.

Chapter 22: The Code of Life

- 1) Review the books by Michael Denton, Michael Behe, Philip Johnson, and William Dempsky that have destroyed the specious notions of spontaneous biogenesis ("theory of evolution").
- 2) What portion of the human DNA is classified as "junk DNA" and why?
- 3) How is the brain organized?

Chapter 23: Our Digital Universe

- 1) Make a compilation of the philosophical paradoxes posed by the discoveries of quantum physics and their implications on our Biblical perspectives and perceptions.
- 2) Compile a list of evidences that we live within a subset of a larger reality—a digital simulation: a virtual set within a larger context unattainable by us directly.

Chapter 24: Your Personal Adventure

- 1) Compile a list of practical tools and techniques that can be used to improve one's personal information hygiene.
- 2) Explore several of the major Bible software programs and compare their features and characteristics.

Chapter 25: The Ultimate Code—You

- 1) Discover your unique spiritual gifts and the specific ministry our King has called you to.

REVIEW

IN PREPARATION FOR THE FINAL EXAM FOR THE COURSE(S), REVIEW ALL ACTIVITIES IN THE STUDY GUIDE. REFER TO THE COURSE MATERIALS ON ISSUES THAT HAVE BEEN MORE CHALLENGING. ONCE YOU ARE CONFIDENT OF MASTERY OF THE SUBJECT THEN PROCEED TO THE FINAL TEST. TEST QUESTIONS WILL COVER THE SCOPE OF THIS COURSE.

