

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

thesis **In the Beginning**

A Book Arts exploration of the Creation Account in Genesis

A thesis presented in fulfillment of the requirements for a degree of Masters in Design
at Massey University, Auckland, New Zealand.

HANA PARK, 2009

Abstract

This research project will explore Book Arts through the book of Genesis, focusing on the first seven days of creation. Particular attention will be paid to the interactive multi-sensual aspects of the book as object and to adding life and meaning to the reading experience. This exploration of Book Arts through Genesis will result in the development of a form of book that encourages engagement in both physical and psychological interactions to find new ways of reading – particularly scriptural texts – influencing spiritual growth and personal relationships. Particularly within, but not limited to, a Christian context. This project seeks to turn the book into a viable organism in our lives. The book itself will engage viewers through layers of sensory experience and nuanced psychological interaction.

Contents

List of Images	7
List of Diagrams	9
1. Introduction	11
1.1 Central Proposition	13
1.2 Background	13
1.3 Research Aims	17
2. Method	19
3. Literature Review	23
3.1 Seoul Design Festival 2008	25
3.2 Interchange Symposium of East Asia Book 2008	31
3.3 The Bible	37
3.3.1 The history of the Bible	38
3.3.2 Judaism, Christianity & Islam	48
3.4 Analysis of Genesis - the Creation Account	53
4. Case Study: Ultimate Assertion	61
5. Design Process	75
6. Interviews/Feedbacks	95
7. Conclusions	101
8. Bibliography	105
9. Appendix	113

List of Images

Image 1. Seoul design festival 2008	25
Image 2. Seoul design festival 2008 - Haptic exhibition	26
Image 3. Seoul design festival 2008 - Haptic exhibition	26
Image 4, 5 & 6. Seoul design festival 2008 - Haptic exhibition	27
Image 7, 8, 9 & 10. Seoul design festival 2008 - Designer's Hand	28
Image 11. Interchange symposium of East Asia Book 2008	31
Image 12. Interchange symposium of East Asia Book 2008 - Lu Jingren	32
Image 13. Interchange symposium of East Asia Book 2008 - Orikata, Design Intangibility	33
Image 14. Interchange symposium of East Asia Book 2008 - Zhu Yingchun	34
Image 15 & 16. Book of Kells	43
Image 17. Book of Kells	44
Image 18. Moveable type	45
Image 19. Gutenberg Bible	46
Image 20. Gutenberg Bible	47
Image 21. Hebrew written character numeric values	64
Image 22. Hebrew numeric values - first verse of Genesis 1	65
Image 23, 24, 25 & 26. Shigeru Ban - paper tube structures	81
Image 27, 28 & 29. Day one	86
Image 30. Day two	87
Image 31. Day three	88
Image 32 & 33. Day four	89
Image 34. Day five	90
Image 35. Day six	91
Image 36. Day seven	92

List of Diagrams

Diagram 1. Table of Hebrew Bible	39
Diagram 2. Religious roots	48
Diagram 3. Comparison of Judaism, Christianity and Islam	51
Diagram 4. Summary of Genesis	53
Diagram 5. The stage of Creation	59
Diagram 6. Numeric sequence	65
Diagram 7. Hexagrams	66
Diagram 8. Natural numbers vs. triangular numbers	67
Diagram 9. Natural numbers vs. triangular numbers	68
Diagram 10. Hexagrams	69
Diagram 11. Hexagrams	70
Diagram 12. 73rd natural number vs. triangular number	71
Diagram 13. Book structures	79
Diagram 14. Cube space structures	80

1. Introduction

1.1 Central Proposition

To develop and design a personal sensual engagement with the Creation Account in Genesis that – through the experience of which – alters the static traditional relationship between viewer and text to a dynamic relationship with a viable organism.

1.2 Background

This project will explore Book Arts through the book of Genesis, focusing on the first seven days of God's creation. Book Arts stands for Book as an Art, a conception of a combination of book and art. In other words, by mixing art with a prototypical book, the book is no longer merely a reading medium but is also an appreciated art form (Kim, 2003). A book is such a familiar object that everyone owns at least one. However, combining the Arts and books draws attention to the fact books can become tools to add to the richness of humanity, and create delightful experiences.

The Bible is evidence of one of the oldest story telling traditions in the world, and is still the best selling book over the world, and has been for more than a century (The Ten Bestselling Books of All-Time, n.d.). There are many different versions of this holy book published in numerous languages, and it is significant to note that Judaism, Christianity and Islam all share the Creation Account in Genesis and much of the "Old Testament". Nonetheless, the Bible – in its current form – is abandoned in every day life by both faithful believers and non-believers alike. There is a significant and widening gap between owning the Bible and being in relationship with God

1.2 Background

through the Bible. The Bible is accepted by Christians, Jews and Muslims as the Word of God as documentation of our early relationship with God and a tool to continue to engage in that relationship, but contemporary reading of the Bible often becomes mere ritual; if it's done at all.

Rituals are sets of actions that have symbolic values and may be performed at regular periods of time. Ritual is one of the tools that can lead to spiritual interaction and engagement in relationship with God, but ritual can also be satisfied through doing acts, instead of helping us appreciate deeper spiritual meaning.

Islamic rituals include the cleansing process before the recitation of the Qur'an; a preparation process before entering into communication with God. Muslims believe that Allah will not accept any prayers without ablution (Esposito, Fasching & Lewis, 2006, p. 220). In Judaism, the Rabbi raises his arms up high before reading the Torah to the public. This public presentation is called the Hagbaha, meaning "to rise up". Judaism also has both ritual objects and symbolic attitudes used before and after prayer that they believe will allow them to receive God's blessing (Quaknin, 1995, p. 42). Christianity places emphasis on faith in God, Jesus as the son of God and the Holy Spirit and strongly states that it is the only way to salvation, rather than ritual presentation. The Catholic Church has many rich traditions, rituals and devotions that are particular to them, but that often overlap into other Christian churches as well. All three religions (Christianity, Judaism and Islam) view the Bible as the voice of God that should be read carefully. What God is telling us also needs to be clearly understood. This is a process of communicating with God in a physical and spiritual way (Esposito, Fasching & Lewis, 2006, p. 135).

The campaign Back to the Bible currently engages people in a relationship with God through the Bible around the world. Back to the Bible has been teaching God's word across America and around

1.2 Background

the world since 1939 by leading people into a dynamic relationship with Jesus Christ. They have used different media through broadcast on the radio and the Internet, on TV and mobile phones to share the Bible, and engage with God. Another new development for them is the Center for Bible Engagement, a research and development division of Bible Engagement that seeks to answer the question, “Why do so many people own the Bible, but so few read it?” Some of the interesting reasons they have found for why people don’t read the Bible are apathy, bad eye sight, they have no idea where to start and it’s boring. On the other hand, reasons they have found why people do read the Bible are to find purpose of life, meet God personally, and to honour and obey God (Back to the Bible, 1996). The Center for Bible Engagement has found many more reasons as to why the Bible is becoming less a part of our daily lives and encourages people toward a vibrant relationship with God by using different media to share the Bible and setting up programmes to encourage believers to read the Bible. There are many such examples of contributing organizations that exclaim the importance of reading the Bible around world, but Christian’s understanding of the significance of reading the Bible remains an issue.

The Bible Literacy Project and the National Bible Association in New York have surveyed secondary school teachers and university professors to find out what American teens and incoming university students need to know. They have found 100% of university professors surveyed - including Yale, Harvard, Princeton and Stanford agreed that incoming students need to know the Bible, 98% of secondary school English teachers said Bible knowledge gives a distinct academic advantage to students in studying English, and 90% of high school English teachers said Bible knowledge was critical for a good education. To that end they have been co-sponsoring a national campaign to produce 5000 billboards that say, “An educated person knows the Bible”. The goal for this project is that everyone should read the Bible. In addition to the billboards, The Bible Literacy Project is providing educators with new tools for increasing students’ knowledge of the Bible in

1.2 Background

public secondary schools. This campaign has gained the respect and admiration of educators and parents across America. (Bible Literacy Project: Press Room: BLP, n.d.) This campaign encourages the students to know the Bible even if they're not believers. The understanding of the Bible is influencing students' ability to understand literature, art, history, music and culture, which is the corner stone of foundational knowledge of Western civilization.

The desired result of my exploration Book Arts through the book of Genesis will be to develop a form of book that encourages engagement in both physical and psychological interactions to find new ways of reading the Bible, influencing spiritual growth and personal relationships with God, particularly within, but not limited to, a Christian context. This project will turn the book into a viable organism in our lives. The book itself will engage viewers through layers of sensory experience and nuanced psychological interaction.

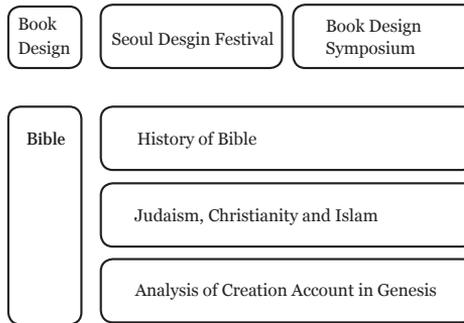
1.3 Research Aims

The key aims of this research project are to:

1. Explore and develop the field of Book Arts.
2. Propose new strategies for reading the Bible that encourage both sensory and spiritual engagement.
3. Research and analyse the history and use of the Bible.
4. Review and analyse Genesis, focusing on the seven days of the creation account.

2. Method

2.1 Literature Review



The first section of the literature review covers the summaries of seminars/workshops for the book design and design trend exhibitions.

Observation of exhibitions drives to acknowledge the relationship between audience and designer. Understanding the recent book designer's works and their idea of materials drives to understand the trend of book design and the relationship between designer and materials.

The second section contains a theoretical review. An analysis of the Bible covers the historical background and analysis of Creation Account in Genesis.

The literature review identifies the context of this project. This is a departure point for the contribution of conceptual and visual design process.

2.2 Case Studies

The research includes analysis of existing materials. The case study covers the evidence of supernatural design in the first verse of Genesis by Vernon Jenkins.

2.3 Interviews

The interviews were held to address aims of the design. The interview method was used to elicit feedback on the design components and the structure of the prototype. These interviews were recorded and a summary of the transcription appended to this thesis. The interview process is in line with Massey University ethical guidelines for research.

3. Literature Review

3.1 Seoul Design Festival 2008



Image 1. Seoul design festival 2008

Seoul Design Festival is an annual event established to celebrate and promote designers and design industries. The festival provides a platform for the creative talent at work and creates a unique opportunity to visit over 200 specific designers. It is also a place for young designers, design thought leaders and design clients from around the world. Seoul Design Festival inspires and engages, and the Festival provides dynamic activities, cultural diversity, exhibitions, workshops and product launches.

3.1 Seoul Design Festival 2008

Seoul Design Festival tour, starting with Milan in April and Berlin in May, was already held in December in Korea. The theme of this year's event was "Art Works".

The special exhibition was held this year. The award winning HAPTIC - Awakening the Senses exhibition was where Kenya Hara collaborated with a number of talented creators from all fields including Naoto Fukasawa, Shingeru Ban, Jasper Morrison, Mathieu Manche and others. The exhibition was curated by Kenya Hara of the Nippon Design Center.



Image 2. Seoul design festival 2008 - Haptic exhibition



Image 3. Seoul design festival 2008 - Haptic exhibition

Hara explains haptic literally which means it is to delight the sense of touch. In his definition, haptic is phenomenally relevant to that which makes all the senses drool. He suggested awakening senses and finding pleasure in individual senses from this exhibition.

The concept of this exhibition was to consciously awaken individual senses. Traditional materials and high technology were used as mediums to discover the hidden senses of human nature. The works from this exhibition were inspired by nature and were designed for the human living environment.

3.1 Seoul Design Festival 2008



Image 4, 5 & 6. Seoul design festival 2008 - Haptic exhibition

Observe the environment, or ecology, of the senses. We deliberately take the results obtained through our senses and turn them to the processes of making things and communicating. This attitude reveals a new field that unites design, science and the senses. This exhibition does not stand for nostalgia. It's creation headed straight for the future. (Kenya, 2007, p.70)

3.1 Seoul Design Festival 2008

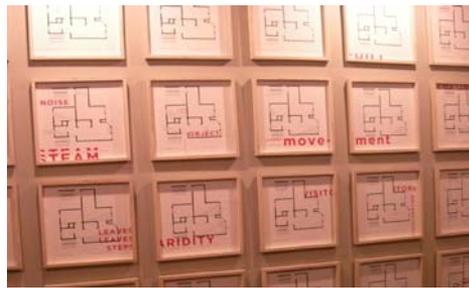


Image 7, 8, 9 & 10. Seoul design festival 2008 - Designer's Hand

The other promotional exhibition was held in the Festival under the theme of 'Designer's Hand'. The concept of this exhibition was the five senses and craftsmanship. The designers were allowed individual spaces and they presented their works to express the five senses using different materials and diverse formats. The exhibition provided dynamic activities so that the viewers could experience the works. The individual space was well considered using lights, placement of the work and sounds, which gave opportunity to the viewers to experience the designer's work using their five senses in the space that the designer provided.

Summary

The Seoul Design Festival takes into consideration the idea of the five senses and integration of the work and the audience. From the Haptic exhibition, the work that can be experienced with the human senses would provide more opportunity to engage the viewer. The five senses are not visible, but the elaborate stimulation and private sentiments are defined as a strong communication tool. The five senses will be used as a concept for this research project to encourage viewers to engage with the physical and the psychological.

From the Designer's Hand exhibition, the space creates a dynamic atmosphere. The viewer would experience the relationship between the work and the surrounding environment in a space. The space invites the viewer and creates a sense of boundary, which is enclosed space that encourages the viewer to engage with the work. The space will be considered for this research project to create a dynamic interactivity that could be experienced by the viewer.

3.2 Interchange Symposium of East Asia Book, 2008

The Asian Imagination and Paper

Lu Jingren, Nobuhiro Yahmaguchi, Zhu Yingchun and Chung Byoung-Kyoo

The symposium of East Asia Book is for book designers and book publishers who are to develop the new concepts of design, art, book design and creation of a new era of book design as a communication medium.



Image 11. Interchange symposium of East Asia Book 2008

The theme of this year's symposium was "The Asian Imagination and Paper". The paper with the book is one of the greatest virtues in the digital age. The book with texture, shade of colour and smell of the paper cannot be expressed in digitalized format. This symposium was designed to understand the difference in the material it follows and to identify the cultural value of paper.

This symposium had four presentations, which were presented by recent book designers around Asia. Discussion workshops followed each presentation.

The summary of each presentation is as follows.

Feeling Paper with the Five Senses – Lu Jingren (China)

The paper with the five senses: sight, smell, touch, hearing and taste opens the stage of imagination to readers. The book that is made of paper is the medium which can be read with the eye. There is an experience of touch when the hand passes over the bookcase or pages. The fibre and the smell of ink can be sensed when a book is opened. The paper has different weight and thickness depending on the quality of materials which make different sounds. By integrating all the elements, there is an appreciative moment which could be described as a taste of the book. The richness of the paper creates the various materials and enables the appearance of the aesthetic attraction.

From a book designer's point of view, the book has to be interesting and informative, pleasing to the eye, touchable by the hand and felt with the heart. The context of the book and design techniques determine the direction of book design; but the texture of the paper, folding structure, binding techniques, printing and structural elements can't be disregarded. The book design will be a communication medium that will bring the book from being a simple visual object to a sufficiently sensible object experienced by the five senses.

Book design is a spiritual creation from the materials. Books have a material existence, the essence of the beauty that book designers create will be embraced in these people who love books and they will be passed on to the next generation.



Image 12. Interchange symposium of East Asia Book 2008 - Lu Jingren

Intellectual way of thinking in the digital era – Nobuhiro Yahmaguchi (Japan)

Orikata, Design of Intangibility – Folds the Paper, Wrap, Send

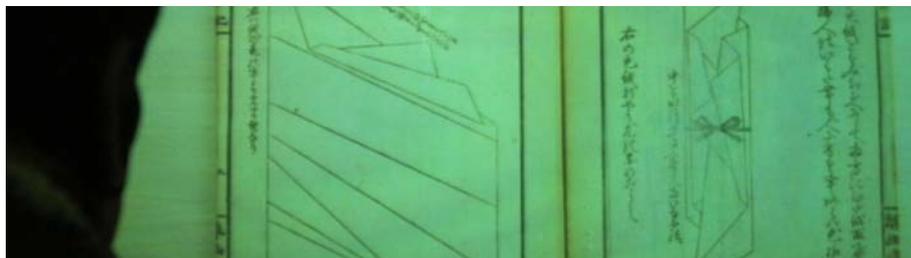


Image 13. Interchange symposium of East Asia Book 2008 - Orikata, Design of Intangibility

The Orikata refers to the wrapping of a present or a gift in paper. There is a form and a shape that come into decision occasionally. The traditional orikata is diverse and complex. Nobuhiro decided to integrate the traditional orikata with the new design trend and the geometric abstraction which has a traditional background by reviewing the shapes and form and redesigning the process of folding rationally. The process of folding and wrapping is a design process. Nobuhiro does not design an object but an order.

Nobuhiro explains, the method of doing things, and a simple process of acting, is a design. The design process has no form or shape; the form comes from natural human reactions, which can be described as design of intangibility. This process is not new, and the process can be learned from doing ordinary actions with the human body, such as, using chopsticks, origami, also tying shoelaces, folding a blanket and thread floating. Nobuhiro reviewed and reordered the doing of ordinary actions and he called his design a design of intangibility, which is not an object, but an order.

Me, Paper and Book Designing – Zhu Yingchun (China)

The paper has an emotion that gives a soul to the book.

The paper is made from vegetation and the vegetation had life. The paper was a tree or a plant and was passed by the process of life pilgrimage to be a plant and reached to one piece of paper. The significance of the paper is more than a physical object; it is the medium which is the spiritual living object. The spirit of the paper has a soul in the book. The reader will experience the texture, thickness, colour of the paper, and sense the messages according to various paper materials. When confronted with different papers, excitement, being calm, joy and all other kinds of emotions can be sensed; like two people facing and responding to each other. Delivering the design concept and expressing the emotion using the paper is the process of having constant conversations with the paper and the designer. However, expressing an emotion on the paper is not a simple work. Zhu said, to bringing the emotion from the paper is the task for the designer. The designer expresses the emotions using the paper and introduces the emotions to the viewer. The expression of the paper is the sympathy of the work and the designer, and also the spiritual dialogue of the designer and the viewer.



Image 14. Interchange symposium of East Asia Book 2008 - Zhu Yingchun

Summary

The symposium was a good opportunity to talk about the paper and book design with recent book designers. The symposium introduced the book as a communication tool and the paper as a spiritual material.

The main points that can be developed for this research project are:

Five senses – The five senses can be presented in a book for this research project, which can be experienced by the individual viewer. The experience of the senses is an intimate and personal involvement that creates an emotional feeling from different materials.

Design of Intangibility – The process of doing actions can be called design according to Nobuhiro. The process of doing an action will encourage viewers to engage in a more physical interaction. The process of doing actions can be developed for this research project. Physical experience will create a more viable psychological interaction.

Paper – The paper has its own spiritual sense and the designer expresses the emotional feelings of the paper. The papers can be used for this research project as materials to encourage the viewer to engage in a more spiritual interaction.

3.3 The Bible

The Bible is a collection of sixty-six books. The Bible is divided into two sections, the Old and New Testaments. The Old Testament, mostly written in Hebrew, talks about God and his chosen people. The Jews collected the Old Testaments and other scriptures that were categorised into divisions such as Law, Prophets, and Writings, which were later called the Hebrew Bible.

The New Testament consists of twenty-seven books that begin with the life of Christ; the Gospels explain details of the life, death, and resurrection of Jesus and Acts including a history of the early churches and letters to the early churches.

In the first part of this chapter, the history of the Bible will be summarised from the ancient period to the Gutenberg Bible. This period of time is also important in the history of book design. The summary will contain the origin of paper, development of books and invention of moveable type that has had a great impact on book design.

The Bible provides a documentary basis for Judaism, Christianity and Islam. Among some traditions, the Bible includes books that were not accepted in other traditions or used by a particular religion; these are known as Apocrypha.

The second part of this chapter will discuss the historical background of three religions and the significance of the Holy Bible to each religion.

3.3.1 The history of the Bible

The word Bible is from the Greek “Biblos”, meaning ‘books’ or ‘scrolls’. This is a good description of the character of what we know as the Bible. The Bible has an enormous history that has been derived with the help of considerable amounts of editing, reinterpretation, and translation from approximately 1400 BC to present. The history of the Bible begins with the Jewish scriptures. The Jewish scriptures were written on parchment in the form of scrolls over the centuries. The scroll (or roll book) was the usual material for the written text in the ancient Jewish tradition. The Jewish texts were written on animal skin, either leather or parchment. The traditional scroll is still used in religious ritual (De Hamel, 2001).

Torah Scrolls are attached to wooden rollers at each end, so that the text can be unfurled horizontally between two hands. Many rituals are attached to Torah Scrolls today and some, including the format and material, are likely to echo practices of extreme antiquity. (De Hamel 2001, p.47)

The first five books were attributed to the prophet Moses in the early 1400s BC and other scriptures were written and collected by the Jewish people during the next 1000 years. About 450 BC, the first five books and other scriptures were arranged by councils of rabbis (Jewish teachers) and recognised as the complete set of the Hebrew Bible. The Hebrew Bible was arranged by topic, including the first five books called The Law (Torah), the prophets (Neblim), and the Writings (Ketuvim). The Hebrew Bible has twenty-four chapters and is divided into three parts. The Torah consists of the first five books of the Bible and the Neblim consists of eight books, and are divided into the earlier Prophets and the later Prophets. The Ketuvim consists of eleven books. These include all the remaining books and are divided into three categories, including the book of Truth, the five scrolls and rest of the writings (Potter, 2007).

3.3.1 The history of the Bible

Torah	Neblim	Ketuvim
1. Genesis	6. Joshua	The Book of Truth
2. Exodus	7. Judges	14. Psalms
3. Leviticus	8. Samuel	15. Proverbs
4. Numbers	9. Kings	16. Job
5. Deuteronomy	10. Isaiah	
	11. Jeremiah	The Five Scrolls
	12. Ezekiel	17. Song of Songs
	13. The Twelve Prophets	18. Ruth
	a. Hosea	19. Lamentations
	b. Joel	20. Ecclesiastes
	c. Amos	21. Esther
	d. Obadiah	
	e. Jonah	The Rest of the Writings
	f. Micah	22. Daniel
	g. Nahum	23. Ezra-Nehemiah
	h. Habakkuk	24. Chronicles
	i. Zephaniah	
	j. Haggai	
	k. Zechariah	
	l. Malachi	

Diagram 1. Table of Hebrew Bible

3.3.1 The history of the Bible

The Jewish scribal techniques were maintained until the invention of printing. The Jews developed methods for counting letters, words and paragraphs to ensure no errors were made (History of the Bible, 2002).

The Hebrew Bible was translated into Greek in 250 BC. The completed translation is known as the “Septuagint”, from the Latin word for seventy, which refers to the seventy-two scholars which comprised the translation team. The order of the Bible was changed in this period to the order we have now. The Septuagint contains twenty-nine Old Testament books and fourteen Apocryphal books.

From 40-90 AD, the New Testament was written. The New Testament was written by Mathew, Mark, Luke, John, Paul, James, Peter and Jude and it contains the story of Jesus, letters and books.

Each of the gospels represents its author’s own understanding and interpretation of the basic tradition about Jesus, and each has its own special material. The Synoptic Gospels (Mathew, Mark and Luke), at least, are largely constructed from small units, such as healing stories, conflict stories and parables. Many of the writings of the apostle Paul are genuine letters, but several of those which have been attributed to him and to other apostles are really different kinds of composition. (Porter, 2007, p.8-9)

The most common writing material during the New Testament period was papyrus. The use of papyrus was an important material for the development of the New Testament, for its limitations imposed restrictions on the length of books. Papyrus is made of plant material and manufactured to about two to three meters in length. The ancient scribes assembled a book in roll form which was then cut and pasted with several sheets together to make a single roll for a large amount of

3.3.1 The history of the Bible

text. It was inconvenient to document the entire Old or New Testaments in a single scroll. The form of a scroll has developed to a form separate texts or clusters of text. This is important in the subsequent history of the Greek Bible. This is the adoption of the codex as a book format (De Hamel, 2001).

The codex ('codices' in the plural) is what we would now recognize as a book – a rectangular artefact with separate pages hinged along their inner edges so that they can be turned one after the other to follow a text from beginning to end. (De Hamel, 2001, p.48)

The Uncial script formed large capital letters without spaces between words; it originated as a small round hand written with a narrow pen or reed. The Uncial script has developed thicker and bigger, and it loses its roundness. The Minuscule was lower case script that has been used more often. This style of writing was cost effective and reduced the speed of the scribal task. The Uncial script can be found from three-hundred Greek manuscripts and the Minuscule used more than two thousand and eight hundred manuscripts (De Hamel, 2001).

About 400 AD, the entire Bible was translated from Greek to Latin by Saint Jerome. He completed his project in twenty-two years and his Bible became the official Latin version, known as the "Vulgate". The name simply means 'popular' version (De Hamel, 2001).

The next several centuries were a period of illuminated manuscripts. The Biblical manuscripts were introduced with highly decorative pages. The illustrations and ornamentations were presented with each manuscript using bright colours and fine vellum (fine parchment). The portraits of biblical personalities were carefully illustrated in manuscripts, called "miniatures" (Brake, 2008).

3.3.1 The history of the Bible

No period in the history of the Bible is more exciting or represents a finer development in art form than the period that produced illuminated manuscripts. Not only was God's message revered, but Christians also treasured and beautified the pages of the sacred text. (Brake, 2008, p.31)

The Book of Kells is an illuminated manuscript in Latin, the oldest surviving illuminated book of the Middle Ages. The Book of Kells is also known as the Book of Columba, produced by Irish monks. It contains the four Gospels of the New Testament. The text is based on St. Jerome's Vulgate Bible. The Book of Kells contains highly decorated illustrations, ornamented borders and miniatures, which were painted by hand. The book contains portraits of Jesus, Matthew, John, and the Virgin Mary and are represented as symbolic figures: Mathew as a man, Mark as a lion, Luke as a calf, John as an eagle. The illustrations feature a broad range of colours, with purple, red, pink, green, and yellow. The capital letters are presented in large sizes and are highly ornamented, surrounded by symbolic figures (Book of Kells c.795-806, n.d.).

The Gospel narrates the life of Christ. The Greek letters chi (x) and rho (P) were often used in medieval manuscripts, the first two letters of the Greek word for Christ. The initial Chi-Rho monogram was enlarged and decorated in the Book of Kells. The Chi-Rho monogram indicates as incipit for the narrative of the life of Christ.

The Chi-Rho in the Book of Kells is composed of shimmering colour and intricate, convoluted form blossoming over a whole page. Authors of the four gospels were signified by symbolic beings. (Meggs, 1998, p.42)

3.3.1 The history of the Bible



Image 17. Book of Kells

3.3.1 The history of the Bible

The Book of Kells was based on Celtic book designs. Celtic design is abstract and extremely complex. The geometric linear patterns weave, and twist textures, and bright, pure colours are

Around 1380 AD, an English theologian named John Wycliffe began a translation of the Bible from Latin to English. He was persecuted by the Roman Catholic Church and the translation was completed after his death by his friends.

In 1456 AD, Johann Gutenberg first printed the Bible. He was the inventor of moveable type in Europe, which opened the possibility to multiply written texts in quantity and in identical copies. The Gutenberg Bible is a folio sized book, about 405 mm by 295mm, hand-bound in two volumes, the first with 648 pages and second with 634 pages. The text was the Latin Vulgate translation of the Bible. Gutenberg used two columns in a page with 29mm gutters. The first nine pages have forty lines in a column, the tenth page has forty-one lines and rest of the pages have forty-two lines per column. Numbers are always written in words and no pictures were allowed. The space was left for initial caps and the sizes of initial were varied depending on the importance of the opening of text. About a quarter of copies of the Gutenberg Bible were printed on parchment with the rest printed on paper. It was the first book that had two different versions with identical content. A paper copy of the Gutenberg bible, with binding, weights about 13.5 kilograms and a parchment book weights about 22.5 kilograms (De Hamel, 2001).



Image 18. Moveable type

3.3.1 The history of the Bible



Image 19. Gutenberg Bible

The quality of the Gutenberg Bible was such a superb example of beautiful typography, it was thought by critics to have been produced later. As a matter of fact, it is considered today to be the finest example of printing ever done. (Brake, 2008 p.73)

3.3.1 The history of the Bible



Image 20. Gutenberg Bible

After the Gutenberg Bible, the English Bible was produced and translated into different versions from 1525 AD. Some of the most common translations are King James Version (KJV), the New King James Version (NKJV), the New American Standard Version (NAS), and the New International Version (NIV).

In recent years, the Bible has been published according to its purpose and added more features like maps, charts and other tips to help Bible reading. The Bibles are targeted to specific demographics or topics which allow the readers to choose for their own purpose (Bell & Campbell, 2005).

3.3.2 Judaism, Christianity & Islam

Judaism, Christianity and Islam are monotheistic religions that believe in the one and only God who created all things. The three traditions begin with the relationship between God and human beings, and being the children of God. The three traditions started to split from Abraham. Abraham had a wife called Sarah, who was not able to give him any children. But she had an Egyptian maidservant named Hagar. Hagar gave Abraham a son, and gave him the name Ishmael. Sarah eventually became pregnant and gave birth to Isaac. Then Sarah began to mistreat Hagar, and Hagar and her son ran away. The Jews and Christians claim descent from Abraham and his wife Sarah through their son Isaac, Muslims trace their religious roots back to Abraham through Ishmael (Esposito, Fasching & Lewis, 2006).

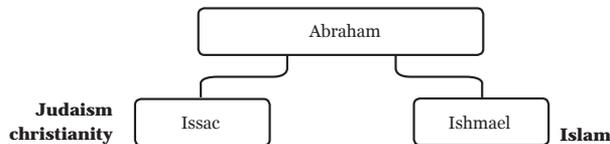


Diagram 2. Religious roots

The ideal goal of life in these religions is the restoration of human wills to harmony with the will of God, whereupon peace and justice will reign and death will be overcome. The means for bringing this about include, but are not limited to, obedience to the will of God, dialog and debate with God (Judaism), acceptance of divine grace or aid through the incarnation of God in Jesus (Christianity), and submission to the will of God (Islam). (Esposito, Fasching & Lewis, 2006 P.22)

3.3.2 Judaism, Christianity & Islam

Judaism

Judaism is the religious culture of the Jews and is one of the world's oldest religions. Judaism believes in the one and only God who created all things and is still waiting for Messiah, the God sent ruler who will liberate the Jews and bring back justice and security to the Earth.

The main theme of Judaism is the covenant between the Jews and God that begins with the covenant between God and Abraham. The Jews seek to bring holiness into every aspect of their lives, and Jewish life is very much the life of a community. Almost everything a Jewish person does can become an act of worship. The rituals can be found from Jews' everyday lives and their culture such as birth, marriage, death, everyday prayers, Sabbath and other religious actions (BBC – Religion & Ethics – Jewish beliefs: Jewish faith and God, n.d.).

The sacred text is the Hebrew Bible and the Talmud. The Talmud is a vast collection of Jewish laws and traditions. Talmud is a guide for the life of the Jewish community.

The Talmud has an interesting page structure. A typical page is made up of diverse and distinct parts, on the same piece of paper. These parts express the voice of rabbis from age to age. The statement from Mishnah¹ is placed in the middle of the page. Above this text, a section of the Gemara² is placed from a period of time, two or three hundred years later. These texts are surrounded by commentaries and marginal notes.

Judaism is a faith of action and treats the Bible as Law. Jews believe people should be judged by the way they live their faith.

¹Mishnah is a compilation of legal opinions and debates.

²Redaction of the Mishnah, rabbis throughout Israel and Babylonia analyzed, debated and discussed that work.

3.3.2 Judaism, Christianity & Islam

Christianity

Christianity believes Jesus is the Messiah (the Son of God) and welcomes everyone who wants salvation and eternal life with God through faith in Jesus and his sacrifice for the remission of their sins. Christians differ from Jews and Muslims in their viewpoint of sin and how it is to be overcome. The original sin is from the first two human beings, Adam and Eve, and is inherited by all descendants. Therefore, God chose to send a savior, Jesus Christ, to redeem Christians by dying for our past sins and restoring human destiny to eternal life with God.

Christians believe that Jesus was raised from the dead three days after crucifixion, and believe in the Holy Trinity. God is one and three separate persons, Father, Son and Holy Spirit (Esposito, Fasching & Lewis, 2006).

Christians use the Bible, the old and New Testaments. Christianity is the world's largest religion and its beliefs are based on the teachings of Jesus Christ.

Islam

The word Islam means “submission,” or the total surrender of oneself to God. The terminology for God is Allah in Islam. Islam was revealed to humanity by the Prophet Muhammad. The angel Gabriel appeared to Muhammad in the city of Mecca and told him that God had commissioned Muhammad as His last prophet. Muhammad completed the Qur’an, Islam’s holy book, until his death. The Qur’an contains 114 chapters, which are written in old Arabic. Muslims believe the Qur’an is the sacred word of God, without any errors. Muslims treat the Qur’an with respect and are still taught to learn and recite it in Arabic (BBC – Religion & Ethics – Texts: Introduction, n.d.).

The comparison of Islam, Judaism and Christianity on statistics, origins, history and religious beliefs is shown on the table.

3.3.2 Judaism, Christianity & Islam

	Judaism	Christianity	Islam
Adherents called	Jews	Christians	Muslims
Current Adherents	14 million	2 billion	1.3 billion
Sacred Text	Bible	Bible (Jewish Bible + New Testament)	Qur'an
Other Written Authority	Talmud, Midrash, Responsa	Church Father, council	Hadith
Religious Law	Halakhah	Cannon Law	Sharia
Clergy	Rabbis	Priest, ministers, pastors, Bishops	Imams
House of Worship	Synagogue	Church, Chapel, Cathedral	Mosque
Main Day Worship	Saturday	Sunday	Friday
Founder	Abraham	Abraham / Jesus	Muhammad
Original Language(s)	Hebrew	Greek, Aramaic	Arabic
Type of Theism	Strict Monotheism	Trinitarian Monotheism	Strict Monotheism
Ultimate Reality	One God	One God	One God
Names of God	Yahweh, Elohim	Yahweh, the Holy Trinity	Allah
Revered Humans	Prophets	Saints, Church Fathers	Prophets, Imams
Identity of Jesus	False Prophet	Son of God	True prophet of God
Birth of Jesus	Normal Birth	Virgin Birth	Virgin Birth
Death of Jesus	Death by Crucifixion	Death by Crucifixion	Did not die, but ascended into heaven during crucifixion
Resurrection of Jesus	Denied	Affirmed	Denied
Second Coming of Jesus	Denied	Affirmed	Affirmed
View of Sacred Text	Views vary	Inspired, some believe inerrant in original language	Affirmed
Means of Salvation	Belief in God, good deeds	Correct belief, faith, good deeds, sacraments	Correct belief, good deeds, five pillars

Diagram 3. Comparison of Judaism, Christianity and Islam

Summary

This section summarised the history of the Bible and the comparisons of Judaism, Christianity and Islam. The history of the Bible is relevant to the history of the book.

The development of the Bible has influenced the progress of the book that has been developed from the ancient period. The scroll was used for the Jewish Bible and it was the first form of editable record keeping texts. The parchment or papyrus was used for the scroll. The codex was invented after the scroll and the manuscripts were developed before the invention of printing by Johann Gutenberg. The Bible has been published since then with diverse formats and translated into different languages.

Therefore, The field of Book Arts has been highly impacted by the Bible. This is relevant to this research project. The new development of the Bible will be applied to the development of the book. The book itself will engage viewers through layers of sensory experience and spiritual interaction.

3.4 Genesis - the Creation Account

Genesis is the first book of the Hebrew bible and the first of five books of the Torah. In Hebrew tradition the book was known as bereshit, “in the beginning”. Genesis comes from the Greek word that means “origins”. Genesis describes the period from the beginning of time to the Patriarchal period. Genesis narrates the origins of the universe, the earth, vegetations, animals and human beings. Furthermore, Genesis narrates the origin of Israel, the chosen people from God.

Genesis can be divided into eight sections: Creation, Fall, Flood, Babel, Abraham, Issac, Jacob and Joseph (Phillips, n.d).

For this research project, only the Creation Account will be focused on and analysed. The NIV will be used for this analysis.

Genesis 1-2	Creation Creation of Cosmos and humanity Adam and Eve in the Garden
Genesis 3	Fall
Genesis 4-9	Flood
Genesis 10	The Tower of Babel
Genesis 15	Abraham
Genesis 27	Jacob
Genesis 37	Joseph

Diagram 4. Summary of Genesis

The Creation

The Creation Account describes the creation of the universe and of the human being. The Creation Account is divided into two different perspectives: the first part of creation illustrates the creation of the universe and the second follows the story of Adam and Eve.

For this research project, only the first part of creation will be analysed.

The creation of the universe appears in Genesis 1:1-2:4 and describes how God creates the universe day-by-day in seven days.

Day One – Genesis 1:1-5

¹In the beginning God created the heavens and the earth. ²Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters. ³And God said, “Let there be light”, and there was light. ⁴God saw that the light was good, and He separated the light from the darkness. ⁵God called the light “day”, and the darkness he called “night”. And there was evening, and there was morning — the first day. (Bible Gate Way, 1995)

On the first day, God created the heavens and the earth from the formless and empty, covered by deep water. He created the light by saying his words “Let there be light”, and there was light. He called the light day and the darkness night.

3.4 Genesis - the Creation Account

Day Two – Genesis 1:6-8

⁶And God said, “Let there be an expanse between the waters to separate water from water”. ⁷So God made the expanse and separated the water under the expanse from the water above it. And it was so. ⁸God called the expanse “sky”. And there was evening, and there was morning — the second day. (Bible Gate Way, 1995)

On the second day, God separated water below and water above and called it sky.

Day Three – Genesis 1:9-13

⁹And God said, “Let the water under the sky be gathered to one place, and let dry ground appear”. And it was so. ¹⁰God called the dry ground “land”, and the gathered waters he called “seas”. And God saw that it was good. ¹¹Then God said, “Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds”. And it was so. ¹²The land produced vegetation: plants bearing seed according to their kinds and trees bearing fruit with seed in it according to their kinds. And God saw that it was good. ¹³And there was evening, and there was morning — the third day. (Bible Gate Way, 1995)

On the third day, God created the land and seas. He made the land to produce vegetation according to their various kinds.

Day Four – Genesis 1:14-19

¹⁴And God said, “Let there be lights in the expanse of the sky to separate the day from the night, and let them serve as signs to mark seasons and days and years, ¹⁵and let them be lights in the expanse of the sky to give light on the earth”. And it was so. ¹⁶God made two great lights — the greater light to govern the day and the lesser light to govern the night. He also made the stars. ¹⁷God set them in the expanse of the sky to give light on the earth, ¹⁸to govern the day and the night, and to separate light from darkness. And God saw that it was good. ¹⁹And there was evening, and there was morning — the fourth day. (Bible Gate Way, 1995)

On the fourth day, God created the sun, the moon and the stars and he separated the seasons and the days and the years.

Day Five – Genesis 1:20-23

²⁰And God said, “Let the water teem with living creatures, and let birds fly above the earth across the expanse of the sky”. ²¹So God created the great creatures of the sea and every living and moving thing with which the water teems, according to their kinds, and every winged bird according to its kind. And God saw that it was good. ²²God blessed them and said, “Be fruitful and increase in number and fill the water in the seas, and let the birds increase on the earth”. ²³And there was evening, and there was morning — the fifth day. (Bible Gate Way, 1995)

On the fifth day, God created birds and fishes according to their kinds and he blessed them.

Day Six – Genesis 1:24-31

²⁴And God said, “Let the land produce living creatures according to their kinds: livestock, creatures that move along the ground, and wild animals, each according to its kind”. And it was so. ²⁵God made the wild animals according to their kinds, the livestock according to their kinds, and all the creatures that move along the ground according to their kinds. And God saw that it was good. ²⁶Then God said, “Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground”. ²⁷So God created man in his own image, in the image of God he created him; male and female he created them. ²⁸God blessed them and said to them, “Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground”. ²⁹Then God said, “I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. ³⁰And to all the beasts of the earth and all the birds of the air and all the creatures that move on the ground – everything that has the breath of life in it – I give every green plant for food”. And it was so. ³¹God saw all that he had made, and it was very good. And there was evening, and there was morning – the sixth day. (Bible Gate Way, 1995)

On the sixth day, God created living creatures and wild animals according to their kinds. He created male and female in his own image and blessed them to be fruitful and increase in numbers and rule over the fish of the sea, birds of the air and all living creatures that move on the ground. He gave them plants of the whole earth and every tree that has fruit for food.

Day Seven – Genesis 2:1-3

¹Thus the heavens and the earth were completed in all their vast array. ²By the seventh day God had finished the work he had been doing; so on the seventh day he rested from all his work. ³And God blessed the seventh day and made it holy, because on it he rested from all the work of creating that he had done. (Bible Gate Way, 1995)

On the Seventh day, God rested from all his work and he blessed the seventh day and made it holy.

The first chapter of Genesis is the most God-centered chapter in the Bible. God is mentioned by naming thirty-two times in thirty-one verses and using of personal pronouns eleven times. The statement “and God said” can be found ten times (Phillips, n.d). The expression of “God saw that it was good” occurs after he had created each day except for the second day. However, God mentioned it two times on the sixth day and he said, “it was very good” after he saw all that he made. The word “good” in Hebrew is “tob” and is used in a general way to describe a state of well being (Gulley, n.d).

There is a significant relationship between the first three days and the last three days of Creation Account. God created the domains of habitations on the first three days and he created inhabitants of these domains on the last three days. On the first day, God created the light and darkness. The first day corresponds to the fourth day, God created the sun, the moon and the stars. On the second day, God created sky and water, which relates to the fifth day. God created birds and fish. On the third day, God created the land and seas. He made the land to produce vegetation according to their various kinds. The third day relates to the sixth day. God created living creatures and wild

3.4 Genesis - the Creation Account

animals according to their kinds. He created male and female in his own image and blessed them. On the seventh day, God rested and blessed (Gundry, 2005).

Day 1 - Light/Darkness	↔	Day 4 - sun, moon and stars
Day 2 - Sky/Water	↔	Day 5 - Birds and Fish
Day 3 - Land/Vegetation	↔	Day 6 - Animals, Humans
Day 7 - Rest and Blessed		

Diagram 5. The stage of Creation

Conclusion

Genesis is the first chapter of the Bible and the Creation Account is the first story of Genesis. The Creation Account narrates the creation of the universe and of human beings in seven days. God created the universe and human beings in six days of the creation week. The narrative ends with the Sabbath in Genesis 2:1. The word Sabbath is derived from the Hebrew word, meaning “to cease” from a previous activity. The work of Creation was finished on the sixth day and God rested and blessed it on the seventh day (Gulley, n.d).

For this research project, the Creation Account will be used as a context. The process of concept for this research project will be explored through various ideas based on the days of the creation. The experimental elements will be explored for each day of creation and also the idea of correspondence between the first three days and last three days will be considered.

4. Case Study

4. Ultimate Assertion

The first verse of the Torah and the Holy Bible can be analysed by numerical values that are traditionally accepted to the letters of the Hebrew and Greek alphabets. Pioneers in this study of Genesis 1:1, in particular Vernon Jenkins MSc, have verified the phenomenon of grammatical symmetries and logical consequences. Vernon Jenkins, who is a Senior Lecturer for Computer Science and Mathematics at the University of Glamorgan, has discovered a numerical and geometrical matrix in the Bible. Professor Myung Hyun Kim analysed more biblical relationships between numerical significance and intelligent design based on Jenkins's theory. This chapter will contain the summary of both professors' assertions.

Each letter in Hebrew has traditionally accepted numerical values. The first ten letters have values 1-10. The next nine letters are valued at 20, 30,..100 and the remaining letters are valued at 200, 300 and 400. The Hebrew numeric system operates on the additive principle in which the numeric values of the letters are added together to form the total. The Hebrew numeric system was used for biblical texts and the Hebrew calendar. In the ancient papyrus period, the original manuscripts were copied by hand and the numeric system was used to count characters and sections. The process of transferring from copy to copy was made with exacting care and precision (Brake, 2008).

The number values for each character are shown in the table on next page.

4. Ultimate Assertion

Place:	1	2	3	4	5	6	7	8	9
Letter:	א	ב	ג	ד	ה	ו	ז	ח	ט
Value:	1	2	3	4	5	6	7	8	9
Place:	10	11	12	13	14	15	16	17	18
Letter:	י	כ	ל	מ	נ	ס	ע	פ	צ
Value:	10	20	30	40	50	60	70	80	90
Place:	19	20	21	22					
Letter:	ק	ר	ש	ת					
Value:	100	200	300	400					

Image 21. Hebrew written character numeric values

4. Ultimate Assertion

In Hebrew, there are seven words in the first verse of Genesis 1. The total number of letters is 28. The sentence is divided into two equal parts: The first three words, “In the beginning God created” contain fourteen letters and the remaining four words contain fourteen letters. The seven Hebrew words have numerical values for each letter. The sum of each letter will be the numeric number for each word. The numeric numbers for each letter and words are shown in Image 22.

7	6	5	4	3	2	1
90 200 1	5 400 1	5 40 10 40 300	5 400 1	5 40 10 5 30 1	1 200 1	2 400 10 300 1 200
אָרֶץ	וָאֵת	הַשָּׁמַיִם	וְאֵל	אֱלֹהִים	בָּרָא	בְּרֵאשִׁית
earth	the	anc	heavens	the	God	created
296	407	395	401	86	203	913

Image 22. Hebrew numeric values - first verse of Genesis 1

There is an interesting sequence when two or three words are added up together.

The sum of first word (in the beginning) and the third word (God) is 999. The numeric value of the second word (created), the fourth word (the) and the fifth word (heavens) is 999. The sum of the third word (God), the fifth word (heavens) and the sixth word (and) is 888. The sum of the third word (God), the fifth word (heavens) and the seventh word (the earth) is 777. These numeric numbers are shown below:

In the Beginning (1) + God (3) = 999 = 913+86
Created (2) + The (4) + Heavens (5) = 999 = 203+401+395
God (3) + Heavens (5) + And (6) = 888 = 86+395+407
God (3) + Heavens (5) + The earth (7) = 777 = 86+395+296

Diagram 6. Numeric sequence

4. Ultimate Assertion

The base number of this sequence will be 111. The number 111 can be made from $37 + 37 + 37$. The number 37 relates to a hexagram. The smallest hexagram needs 13 units and the next hexagram needs 37 and the last hexagram needs 73. This is presented in Diagram 7.

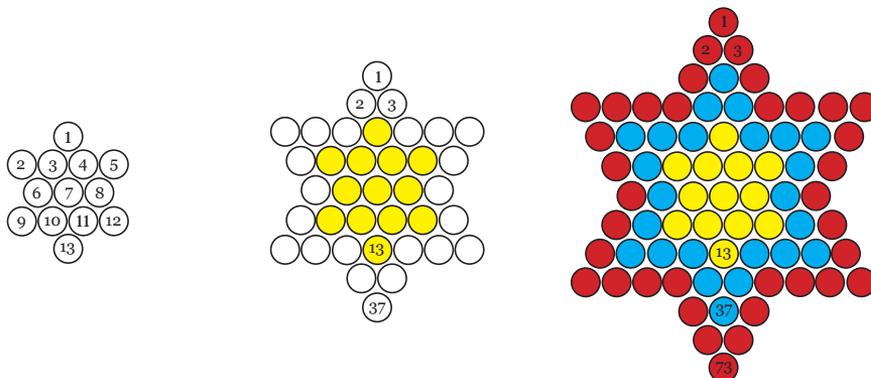


Diagram 7. Hexagrams

The shape of the hexagram is the Star of David or Shield of David, which is used as a national emblem of State the of Israel. The Star of David is a generally recognized symbol of Jewishness and Judaism. It has a historical background and metaphorical meanings.

The hexagram (six-cornered shape) was used in the Middle Ages by Jews, Christians, and Muslims...The Star of David is full of symbolism: the six triangles represent the six days of creation, while the large hexagon in the middle represents the seventh, the day of rest. (Verlag, 2008, P.220)

4. Ultimate Assertion

The numerical values for two or three words were 999, 888 or 777. The base number for these numbers is 111 or $37+37+37$. The number 37 represents the hexagram, which means the number 111 contains 3 hexagrams. If the 999 is the numerical value for the words, it contains 27 hexagrams. Therefore, the first verse of Genesis 1:1 contains sets of the Star of David.

There is significance between Genesis 1:1 and the Star of David.

The sum of the 7 words' values is 2701 or 37×73 . Jenkins explains geometric association with 2701 in numerical expression of Genesis 1:1.

The numbers can be compared with natural numbers and triangular numbers. The natural numbers go 1, 2, 3...etc and the triangular numbers are 1, 3, 6 and so on. This is presented in Diagram 8.

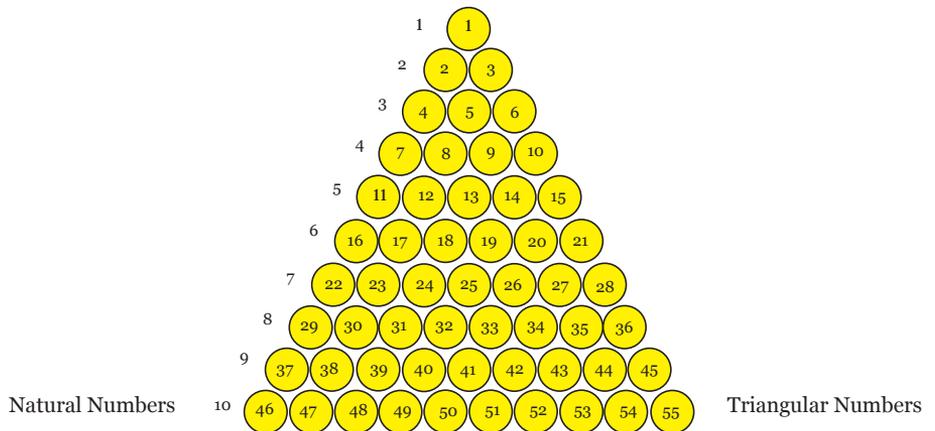


Diagram 8. Natural numbers vs. triangular numbers

4. Ultimate Assertion

The 73rd natural number is matched up with 2701 triangular numbers. Therefore, the first verse of Genesis contains a triangular number. The sum of the 6th and the 7th words is 703, or 19×37 , similar geometrical relationship between these factors. The 37th natural numbers are matched up with 703 triangular numbers. The 73×37 is 2701 and the number 37 is matched up with the sequence number of the Star of David. This is presented in Diagram 9.

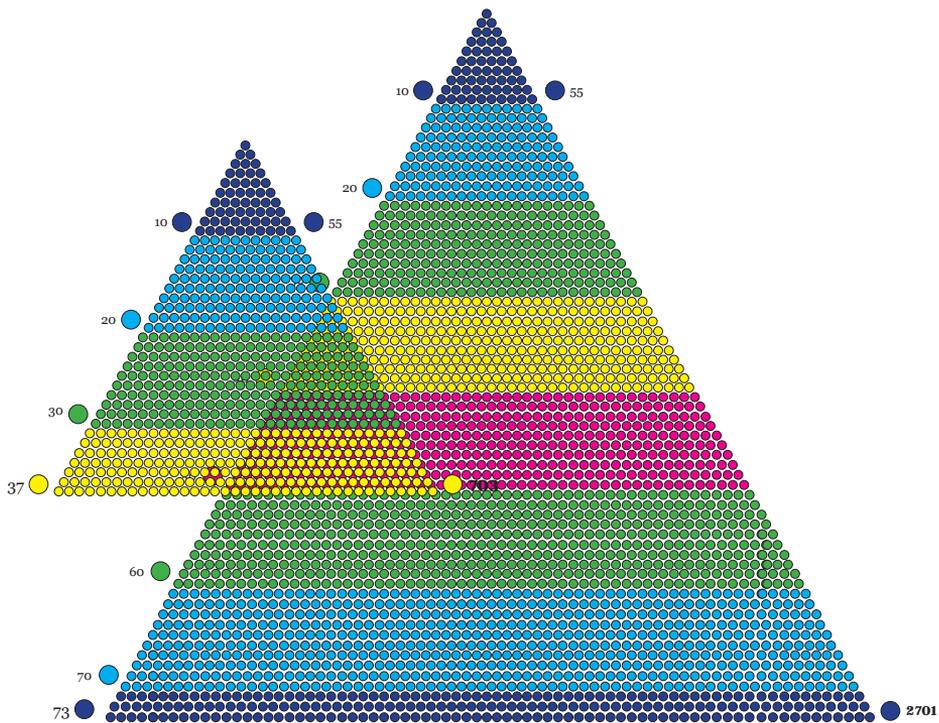


Diagram 9. Natural numers vs. triangular numbers

4. Ultimate Assertion

There is a significant relationship between 73-as-hexagram and 37-as-hexagram. The hexagon can be separated from 73-as-hexagram and the hexagon shows the same number as 37-as-hexagram. Therefore, inside the 73-as-hexagram can be the 37-as-hexagram within a cube shape. This is presented in Diagram 10.

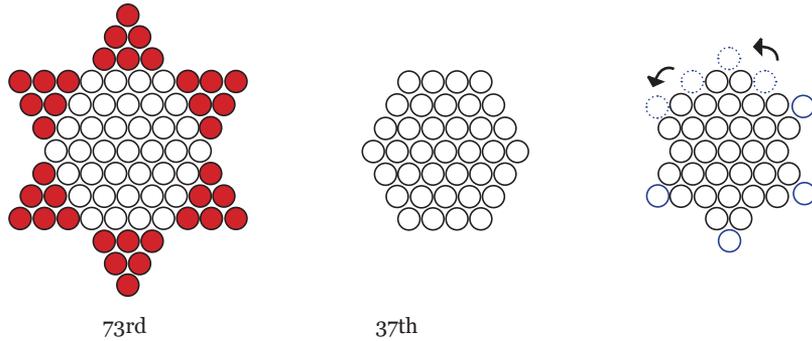


Diagram 10. Hexagrams

4. Ultimate Assertion

The 73-as-hexagram (73) times 37-as-hexagram (37) is 2701, which is the sum of 7 the words of Genesis 1:1. It can be applied to other hexagrams. 37 times 19 is 703, which is the sum of the 6th and the 7th words. 19-as-hexagram has 13 and 13-as-hexagram has 7. 7, 13, 19, 37, 73 prime numbers, which cannot be divided into any other numbers.

The basic numbers for the Star of David are 3 and 7. This is presented in Diagram 11.

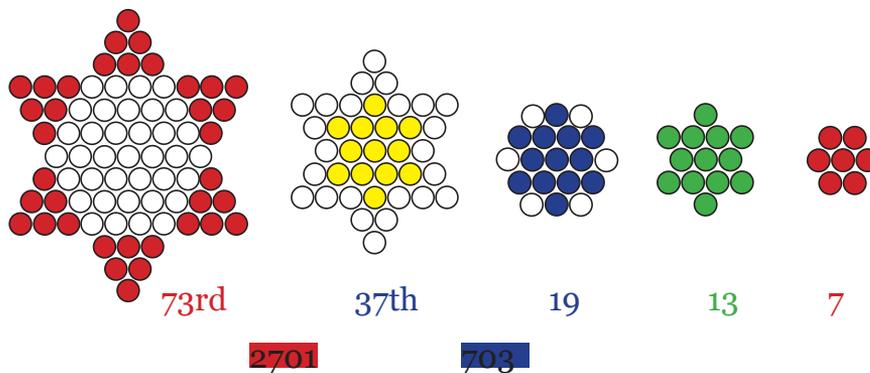


Diagram 11. Hexagrams

The number 3 and 7 have symbolic meanings in the bible. The number 3 represents the Trinity in Christianity. The unity of Father, Son and Holy Spirit are like three persons in one God. The number 7 represents the creation of the universe. The 3 and 7 can be described as the creation of God.

Therefore, the symbolic meaning for the Star of David is the first verse of Genesis 1:1; in the beginning, God created the heavens and the earth.

4. Ultimate Assertion

The outline of each of the foregoing figures on 73rd triangle comprises 216, or 6x6x6 counter. These numbers can be called unit cubes shown below:

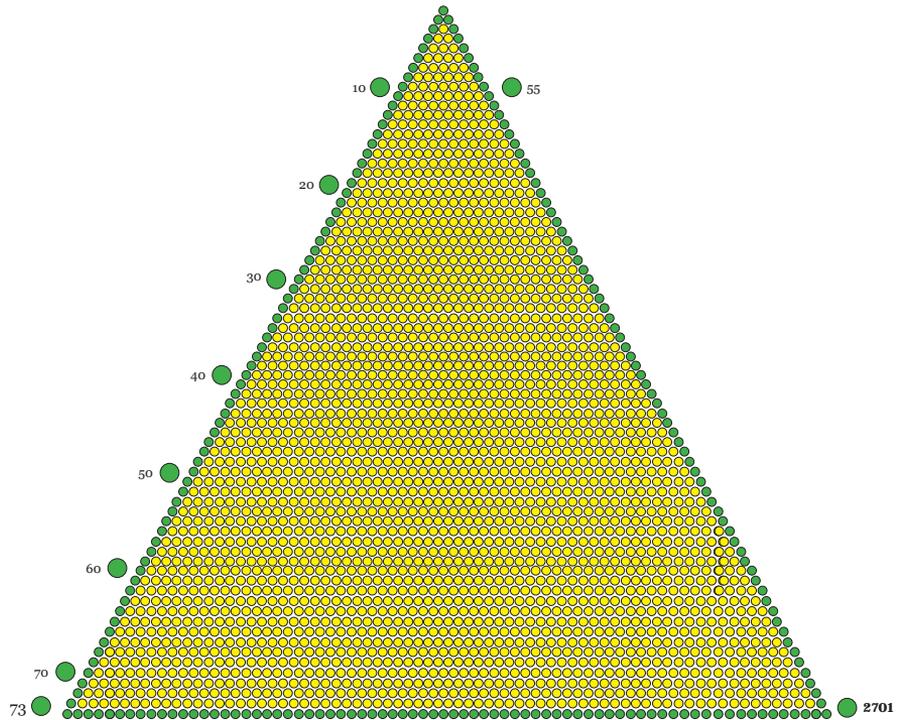


Diagram 12. 73rd natural number vs. triangular number

4. Ultimate Assertion

The Genesis 1:1 is encircled with unit cubes. The cube has symbolic meanings in the Bible as the Most Holy Place. Within the Holy Place of the tabernacle, there was an inner room called the Holy of Holies, or the Most Holy Place. The tabernacle was a meeting tent, which is described clearly in Exodus 40. The tabernacle was a place where God existed and interacted with his people. It was the place for worship and offering of sacrifices. The Most Holy Place was placed inside the tabernacle and it was the most sacred room, a place no ordinary person could enter except the High Priest. The Most Holy Place in the tabernacle represented God's throne on Earth (The Holy of Holies and the Veil, n.d.).

God gave his word to Moses to build the tabernacle (Exodus 26). God explained the specific materials, measurements and colours to make the tabernacle. The Most Holy Place was a perfect cube—its length, width and height was all equal to 15 feet (about 4.5 metres). The Most Holy Place can be found in other chapters in the Bible.

Solomon built the Temple and the measurement was 30 feet (about 9 metres).

“¹⁹He prepared the inner sanctuary within the temple to set the ark of the covenant of the LORD there. ²⁰The inner sanctuary was twenty cubits long, twenty wide and twenty high.” King 1 6:19-20 (Bible Gate Way, 1995)

In the Revelation chapter, the new city is described as a square.

“¹⁶The city was laid out like a square, as long as it was wide. He measured the city with the rod and found it to be 12,000 stadia in length, and as wide and high as it is long.” Revelation 21:16 (Bible Gate Way, 1995)

Therefore, the Bible describes the cube as a sacred measurement and the first verse of Genesis 1:1 contains cube units, which means the first verse of Genesis 1:1 is the sacred passage from God.

4. Ultimate Assertion

Summary

From Jenkins's assertion, the first verse of Genesis 1 contains the hidden shape of the Star of David. The Star of David has a strong significant relationship with Genesis 1:1.

The Star of David (hexagram) can be used as a concept for this project. From the analysis of Genesis, the first three days corresponds to the last three days. The shape of the triangle of the hexagram can represent six days and can be placed facing the corresponding days. The inner shape of the hexagon can be represent on the seventh day.

The first verse of Genesis 1 has cube unites in a numerical matrix. The cube units are the most sacred measurement in the Bible and used as a measurement of the Most Holy Place.

The shape of the cube can be found in the Kaaba in Mecca as well. The Kabba in Mecca is the central point of Islam. According to Islamic tradition, the first building at the site was built by Abraham. Muslims pray facing Kaaba.

According to the Qur'an, it was originally made by Adam and later rebuilt by Abraham and Ishmael. When the Prophet Muhammad conquered Mecca, he destroyed 360 false idols at the Kaaba. (Verlag, 2008, P.66)

The cube can be used as one of the concepts for this research project. The cube has strong symbolism significant to Genesis 1:1. What I have found from the previous chapter is that the space creates a dynamic atmosphere and sense of boundary. One of the concepts for this research

4. Ultimate Assertion

project will be a spacious place with the shape of a cube and in which the viewer can experience the seven days of creation. Each wall of the cube could represent each day and can be placed facing its corresponding day. The space created within the cube can be called the seventh day.

Each day could have different experiences according to context. The space can be called a “book”, which could include all aspects of the traditional book. For example, the front cover could be a door for this space, page numbers could be placed on each wall and the spine could be a structure of the space. This approach will engage viewers with the physical experience and psychological interaction through the book itself. The book-like space, will offer the opportunity to engage psychologically in the content and the physical experience.

5. Design Process

5.1 Brief

The aim of this research project is to find a new way of reading to encourage physical and psychological engagement with the viewer in the form of a book, influencing spiritual growth and personal relationships with God, particularly, within, but not limited to, a Christian context. The Creation Account will be used for the context of this research project.

The target audience for this project is anyone who is interested in the Bible, not limited to believers or non-believers and also to any other religion. This project is open to everyone to encourage engagement in both physical and psychological interactions. The final outcome of this project will be a tool for introducing knowledge of the Bible as a literal meaning and as a tool for communicating with God as a metaphorical aspect.

5.2 Development

From the literature review, I have found key elements from each chapter to develop concepts for this project. The final design of this project will rely on the undertaken research.

The key elements from each chapter are as follows:

Chapter 1 – Exhibitions/Symposium

Five senses

Space

Design of Intangibility – process of doing action

Using different stocks of paper

Chapter 2 – Analysis of Genesis

Creation Account describes the creation of the universe and human beings, seven days
Correspondence between the first three days and last three days of the Creation Account

Chapter 3 – Ultimate Assertion

Shape of hexagram – the first verse of Genesis 1 contains sets of the Star of David
Shape of cube

I have developed various concepts and produced prototypes to explore diverse possibilities to comprehend the significant of the key elements as listed above. I have been looking at different structures, folding, optical illusions, moon type and other aspects that can be experienced or sensed with the human body; it contains the narrative of the Creation Account which is correspondent to the first three and last three days. I have finalised a concept for further investigation, which is explained in the following chapter.

5.3 Process

5.3.1 The Room

Concept

One of the concepts was a cubical space, which contains the narrative of the Creation Account and can be viewed and experienced by the audience. Each wall of the cubical space represents each day facing the corresponding days. Each wall has a different experimental task according to the Creation Account. The space can be called a book, which will contain structural aspects of traditional books. This approach will engage viewers with the physical experience and psychological interaction through the book itself. The book-like space, will offer the opportunity to engage in the content and physical experience.

Each design aspect is described in the following section.

Book structure

The common structural parts of a book include:

- Gutter
- Top edge
- Front cover
- Endpaper
- Title page
- Table of contents
- Page numbers
- Introduction
- Body
- Bibliography/Index
- Tail edge

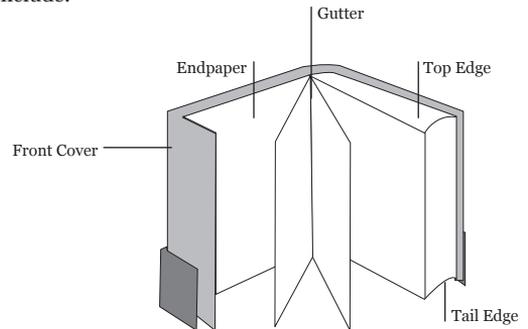


Diagram 13. Book structures

5.3.1 The Room

The structural parts of the cubical book-like room are:

Gutter

Top edge

Front cover – front door

Endpaper

Title page – a sheet of paper on the front door

Table of contents – can be placed a table and the contents will be written on the table.

Page numbers – will be placed on each wall according to days.

Introduction

Body – each wall

Bibliography/Index

Tail edge

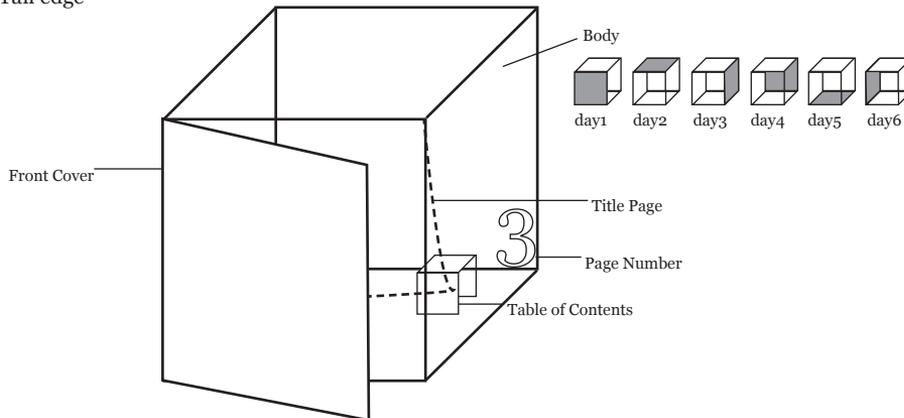


Diagram 16. Cube space structures

5.3.1 The Room

To emphasize how the space is like a book, the material of this space will only be using paper. The paper tubes will be used for the structure of this cubical space. The architect Shigeru Ban is designing buildings using paper tubes and he found that paper has enough strength and durability to be used in permanent building.

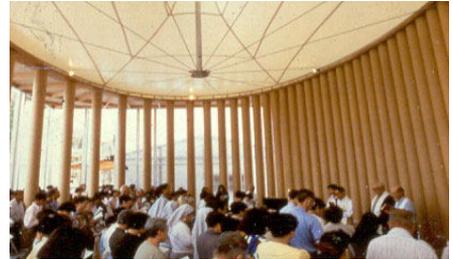


Image 23, 24, 25 & 26. Shigeru Ban - paper tube structures

The paper tubes will be joined together to create a cubical space for this research project and can be used with similar techniques that Shigeru Ban used for his buildings.

The inside of this cubical space will be covered with different types of papers depending on individual experience for each days of the Creation Account.

5.3.1 The Room

Contents

Day 1

On the first day, God created the light and he separated the light from the darkness. The first day will be a front door for the cubical space. The outside of the space will be dark and the inside of the space will be bright using light that creates the sense of separating the light from the darkness when the viewer opens the front door.

Day 2

On the second day, God separated the water and sky. The second day will be placed on the ceiling of the cubical space. The threads will be hanging from the ceiling to the floor with a piece of paper attached. The viewer can pull down the thread and the paper will go up to the ceiling, which gives the opportunity to experience the separating water and water above to the viewer.

Day 3

On the third day, God created land and let the land produce vegetation according to their various kinds. The third day will be placed next to the first day. The wall of the third day will not be covered with paper but pre-drilled tubes will be displayed. The paper sticks and the shape of the leaves and fruits, made from paper, will be prepared for the viewer. The viewer will place the paper stick, which represents the branch, into the pre-drilled tube, the tree, and suspend the leaves and the fruits into the branch. This experience gives the opportunity to the viewer to “grow” vegetation.

Day 4

On the fourth day, God created the sun, the moon and the stars and he separated the seasons, the days and the years. The fourth day will be placed to face the first day. The roll of paper will be displayed and divided into four sections with different textured papers that express each season.

5.3.1 The Room

The icon of each season will be designed and prepared for the viewer. The viewer will write down a memory of the chosen season or wish for the particular season and stick-it to the matched season. This experience will give the opportunity to consider time, which brings the memories from the past and the anticipation of the future.

Day 5

On the fifth day, God created birds and fishes according to their kinds. The fifth day will be placed on floor, which corresponds to the second day above, on the ceiling. The paper will be covered on the floor. Black and blue papers, glue and scissors will be prepared for the viewer. The viewer will use a black paper to cut the shape of the bird depending on viewers' expression of the bird and the blue paper for the fishes. The black paper represents the shadow of the bird from the sky that reflects on the sea and the blue paper represents the sea and fishes.

Day 6

On the sixth day, God created living creatures and wild animals according to their kinds. He created male and female in his own image and blessed them. The sixth day will be placed to face the third day. The key idea of the sixth day is that God made you and others. Tracing paper will be displayed and drawing tools will be prepared for the viewer. The viewer will draw their portrait or trace their body part and sign and date it with the correct time. The tracing paper will be layered after a layer is filled with drawings creating many layers deep of drawings.

Day 7

On the seventh day, God rested from all his work and he blessed the seventh day. The space created within the cube can be called the seventh day. The space contains all six days that can be expressed as completion of the Creation.

5.3.1 The Room

Exhibition

For this cubical space, the exhibition will be run over seven days. The exhibition will be open to the public to enjoy the physical experience from the first day to the sixth day. On the seventh day, there would be no physical experience, but what has been completed since the first day would be viewed, which is significant to the seventh day of the Creation. God had finished the work he had been doing and he rested from all his work and blessed it.

Meetings and Presentation

I had a meeting with an architect and a product designer to discuss the structure of this cubical space. We looked at the historical churches, Shigeru Ban's work and the current work that has been built with paper. We have discussed the paper tubes and how the space needs to be constructed.

After the meeting with the architect and product designer, I came up with measurements for the space. I had been looking at the ergonomics, human body dimensions and space maximum numbers. The measurement of this space will be 2.4 m x 2.4m x 2.4m. The number twenty-four associated with the heavenly government and worship (Meaning of Numbers in the Bible Number 24, n.d.).

I had a presentation with my supervisor and co-supervisor to propose this concept idea and we have agreed this cubical space is too spacious and extensive for this project, which could not be completed within a year.

After the presentation, I have developed more concept ideas and also worked on the cubical space in different perspectives. The cubical space has been developed in a different form but still has similar aspects, which will offer the opportunity to engage in the content and physical experience.

This will be explained in the next section.

5.3.2 The Book

I continued to work to develop the idea of the intellectual space or object that can be experienced and sensed by the human body. I have reached a final direction that involves seven individual book-like elements. One for each day in the account. I have developed seven individual experiences for each element. Each experience is based on what God has done for each day and corresponding with relating days. (day one - day four, day two - day five, day three - day six) Experiences for each day have been carefully developed and designed for the viewer, which give the opportunity to experience, display and work for their own style from their own environment. This book-like object is a fundamental form of a book containing experiences for a reader to incorporate each experience into their own interpretation.

This concept appropriately addresses the problem with earlier concept's scale and complexity and ideas required by the brief design. The next step was refining this concept into a package that includes consideration of structural measurement and visual aesthetic style.

5.3.2 The Book

Contents



Image 27, 28 & 29. Day One

Day one

God created the light and separated light from the darkness.

LED lights have been used in order to express the light and a switch has been produced to control the light.

The viewer will experience the separation of the light by turning the light on and off with the switch.

5.3.2 The Book



Image 30. Day Two

Day two

God separated the water and sky.

Handmade papers have been produced for the second day. The handmade paper has a colour gradient from blue to white, which expresses the separation of the water and water above.

The viewers will experience the texture of the handmade paper, which expresses the feeling of the ocean and the clouds, and enjoyable colour gradient.



Image 31. Day Three

Day three

God created land and let the land produce vegetation.

Threads have been used in order to express the vegetation. The threads were dyed from organic materials, such as fruit juice, grow up plants and tea bags to obtain natural tones of colours; however, the deep green was difficult to get with dyeing. The dyed threads were used for natural brown tones and the pre-coloured threads were used for remaining colours. Needlework has been done on the paper with the tree shape and covered on the top of the threads. The different colours of threads are coming out from the tree branches, which express the various kinds of vegetation.

5.3.2 The Book



Image 32 & 33. Day Four

Day four

God created the sun, the moon and the stars and he separated the seasons, the days and the years.

A light shade has been designed to express the seasons. Each season has been developed according to its characteristics and placed on each side of the cube of the light shade. On the top side of the light shade there is the shape of the moon and the stars. The paper-cut method has been used to produce the light shade and was covered with different textured paper to express characteristics of seasons and the moon and the stars.

The viewer will experience the characteristics of each season with different types of papers and placed the light shade on the top of the first days' LED light, which will be addressed to the viewer that the first day and the fourth day corresponds to each other.

5.3.2 The Book



Image 34. Day Five

Day five

God created birds and fishes according to their kinds.

The instructions for how to fold the bird and the fish has been developed for the fifth day.

The viewer will follow the instructions to fold the birds and the fishes using the second days' handmade paper.

5.3.2 The Book



Image 35. Day Six

Day six

God created living creatures and wild animals according to their kinds. He created male and female.

Cards and envelopes have been produced for the sixth day. The cards have holes in the shape of animals and a man. Five animals have been carefully selected and six different types of textured paper have been chosen for the six different cards. The shaped holes have been used for the container also to continue the visual aesthetic style.

The viewer will experience the needlework with pre-drilled card using the third days' threads. The viewer will have an opportunity to write a message on the card and send to others. This opportunity will allow the viewer to communicate to others and invite others into the story of the Creation Account.

5.3.2 The Book



Image 36. Day Seven

Day seven

God rested and blessed it.

There is no active experience for the seventh day. The viewer will have a heavy closed empty book, which represents the rest and the holiness.

5.3.2 The Book

Measurements and materials

The cubical measurement was again explored for the book. This book-like element contains seven individual boxes with lids and an outside box to contain the seven smaller boxes together.

The material used for the book was only paper and cardboard. Different types of papers were used for this element, which express various emotional feelings depending on texture, thickness and colour of the paper. The significance of the paper is more than a physical object as I researched from the literature review. The viewers will communicate with the papers and emotions can be sensed from the paper. The element becomes more personal and an appreciated object to the viewer.

Colour

The colour white was used for the book. The significance of white is emptiness; the earth was formless and empty when God created the heavens and the earth before He created the light on the first day. The white offers an empty box to the viewer who supplies the meaning themselves by communicating with papers and its contents.

Text

The instruction booklet made for the book describes clearly how to experience the book. The final typeface was carefully decided onto create an impression suitable to the overall aesthetic style.

Wax Seal

The wax seal was made for the book. The shape of the seal is the Greek Alpha. The Alpha is the first letter of the Greek language and used for comprehension of God, implying that God is the first (Alpha and Omega (Christianity) – Britannica Online Encyclopedia, n.d.).

The significance of the Alpha for this project would imply that God is first and as an introduction of the Creation Account.

5.3.2 The Book

The prototype was made to examine the engagement of physical and spiritual relationship between the viewer and the content. The interviews were held to testify understandability of the contents, satisfaction of aesthetics style and spiritual integration.

This will be explained in the following chapter.

6. Interviews/Feedbacks

6. Interviews/Feedbacks

The interview was held with the prototype of the book and the interviewee was seating alone in a room and spent 30 minutes experiencing the book before the interview.

Interviewer: Hana Park

Interviewee: Grace Ryu

Date of interview: 2nd July 2009

Grace Ryu is a member of Presbyterian Church of Aotearoa NZ. As a Pastor of the target audience Grace Ryu was asked to comment on:

Grace commented that this book is well transferred metaphysically from the words to the visual object, which can be targeted to the new believers or children, can be used for educational material for the Sunday school.

She felt that the book was easy enough to follow and the diagrams of the instruction book help her to participate in each experience.

Grace commented about the corresponding elements that it is a chronology. It gives the chance to understand the joint relationship of the regiment that one has been completed and is extended to accomplish. It gives the opportunity to the readers to create the another object for their own style and she thinks to give them a chance to make their own creation makes this book more personal.

She was satisfied with the size of the boxes because they are easy to hold and handle.

She felt that the strongest aspects of the book were the paper and use of white. But in the same

6. Interviews/Feedbacks

time, she felt that the weakest aspects of the book were also the paper and use of white because the durability of the paper and the whiteness looks boring.

The whiteness was easily resolved by adding some vibrant coloured threads for the third day. She commented that she believes the experience that stimulates the five senses becomes a part of memory and it was a strong aspect that the book gave her an opportunity to create her own interpretation of the creation account, which makes her to appreciate this book more personal.

She felt that this book is a practical tool for the believers and non-believers that stimulate the sensual engagement with the viewer and the contents, without a word. And the production of the refills could be an ideal option for continuous usage.

6. Interviews/Feedbacks

Another interview was held with someone who doesn't have any information of this research project. The interview was held with the prototype of the book and the interviewee was seating alone in a room and spent 30 minutes experiencing the book before the interview.

Interviewer: Hana Park

Interviewee: Seoung Joo Nam

Date of interview: 9th July 2009

Seoung is a Master student in Biology at Auckland University. As a person who doesn't have any design background of the target audience Seoung was asked to comment on:

Seoung commented that the Book was easy to understand after reading the instruction book. He thinks the instruction book helps each participant to experience.

Seoung felt that the experience of the book was generally easy to follow, in particular, the folding was quite interesting but the folding instruction was too small to read.

Seoung found the corresponding elements are interesting and he knows that they are relevant but the day two and the day five doesn't make sense. He commented it was hard to understand.

Seoung felt that the weakest experience was day three – the threads look like hair and it looks scary and day two – hard to notice the separation between the water and sky.

Seoung commented the physical experience such as folding and sewing helps to remember the creation account. He felt that doing actions helps him to engage the contents more directly.

Summary

The interviews were helpful to refine the final production of the Book.

The instruction book helps the viewer to understand the content and helps to participate in each experience. Seoung commented the folding instruction book was too small to read. This problem was easily resolved by adding more pages and making the diagrams bigger.

Grace felt that the paper and use of white colour are the strongest aspect of the book, but at the same time she felt they are the weakest aspects because the durability of the paper and the whiteness looks boring.

The whiteness was easily resolved by adding more colours through at the Book. (On the second day: Blue was added more for the hand made papers. On the third day: more vibrant coloured threads were added).

Grace commented that she believes the experience that stimulates the five senses becomes a part of memory and it was a strong aspect that the book gave her an opportunity to create her own interpretation of the Creation Account, which makes her appreciate this book more personally. Seoung commented the physical experiences such as folding and sewing helps him to remember the creation account. He felt that doing action helps him to engage the contents more directly.

Grace and Seoung both felt that the prototype encouraged engagement in both physical and spiritual interactions by experiencing the contents and helping to remember the contents by doing actions, which was the aim of this research project.

7. Conclusions

7. Conclusions

The main aim of this project is to propose new strategies for reading the Bible that encourage both sensory and spiritual engagement. This project explored the book of Genesis through Book Arts, focusing on the first seven days of God's creation. This has been achieved with the development of book-like elements that involve experiences for the viewer. The book-like elements have taken into consideration the unique sensory attributes and participation activities that can encourage the process of engaging in both physical and spiritual relationship with God for the viewer.

This book-like element can be called the Book. The book is a medium that functions by delivering, communicating, and exhibiting the contents to the viewer. The book delivers the visual requirement and also delivers the feelings that can be sensed from the materials. There is an experience of touch when the hand passes over the book, the fibers can be smelled and the quality of materials make different sounds. The book is not only the reading medium, but also a communication tool that can be experienced by the five senses.

The five senses were developed as a tool as they allowed the awaking of emotions. Different types of papers have been used to stimulate the five senses. The richness of the papers creates the various feelings that can be sensed by the viewer. The feelings of the papers differ in the individual viewer from their own interpretation of the paper.

The Book can be used in a variety of environments. The individual can experience in their own space and any time of day. The viewer can experience through the Book alone or with a group of people. The Book has been designed specifically for the experiences of the Creation Account. The Book allows the viewer to experience each day of creation and gives the opportunity to understand

7. Conclusions

the content by doing actions. The Book allows the individual to personalise the experience of the Creation Account. The Book encourages the viewer to create their own style, making the experience more personal by creating a sensual relationship with God individually.

The concept of the Book can be developed further to apply to any other biblical narratives. The experimental Bible will offer the opportunity to engage physical and spiritual interactions and influence spiritual growth and personal relationship with God.

8. Bibliography

8. Bibliography

Back to the Bible. (1996). Retrieved August 5, 2008 from <http://www.backtothebible.org>

BBC - Religion & Ethics - *Judaism*. (n.d.) Retrieved May 3, 2009 from <http://www.bbc.co.uk/religion/religions/judaism>

Bell, J.S., & Campbell, S. (2005). *The complete idiot's guide to: The Bible*. New York: Penguin Group.

Bible Analysis: The Book of Genesis. (2006). Associated Contents, May 01. Retrieved February 5, 2007 from http://www.associatedcontent.com/article/29874/bible_analysis_the_book_of_genesis.html

Bible Gate Way. (1995). Retrieved August 5, 2008 from <http://www.biblegateway.com>

Bible Literacy Project: Press Room: BLP, (n.d). Retrieved Spetember 22, 2008 from <http://www.bibleliteracy.org/site/PressRoom/Press061114BB/em061111billboard.htm>

Blech, R.B. (2003). *The complete idiot's guide to: Understanding Judaism*. New York: Penguin Group.

Book of Genesis. (n.d) Retrieved February 5, 2007 from <http://mb-soft.com/believe/txs/genesis.htm>

Brake. D.L. (2008). *A Visual History of the English Bible: The Tumultuous Tale of the World's Best Selling Book*. Grand Rapids: Baker Books.

Bratcher. D. (n.d). *Genesis Bible Study*. Retrieved February 5, 2007 from <http://www.crivoice.org/biblestudy/bbgen.html>

Christian Montenegro. (n.d). Retrieved July 30, 2008 from <http://www.christianmontenegro.com.ar>

8. Bibliography

Clark, M.L. (2003). *Islam for Dummies*. New York: Wiley Publishing.

De Hamel, C. (2001). *The Book*. A History of the Bible. London: Phaidon Press Limited.

Encyclopedia-Britannica. (2002). *Alpha and Omega (christianity)*. Retrieved May 8, 2009, from <http://www.britannica.com>

Esposito, J.L., Fasching, D.J., & Lewis, T. (2006). *World Religions Today*. Oxford: Oxford University Press.

Gomes, P.J. (1996). *The Good Book: Reading the Bible with mind and heart*. New York: The Carol Publishing Group.

Gulley, N.R. (n.d.). *Is the Genesis Creation Account Literal?*. Retrieved April 23, 2009 from http://www.atsjats.org/publication_file.php?pub_id=188&journal=2&type=pdf

Gutenberg Bible. (n.d). British Library Website. Retrieved February 5, 2007 from <http://prodigi.bl.uk/gutenbg>

Hampshire, M., & Stephenson, K. (2007). *Packaging* :Design successful packaging for specific customer groups. Miles: Roto Vision.

Hendrickson, L. (2000). *The view from Rapunzel's Tower*. Children's Literature in Education, 31 (4), 209 – 223.

History of the Holy Bible. (n.d). All about truth. Retrieved February 3, 2007 from <http://www.allabouttruth.org/history-of-the-holy-bible-faq.html>

Hollis, R. (1994). *Graphic design: A Concise History*, Second. New York, USA: Thames & Hudson.

8. Bibliography

John, J. F. (1778). *The History of the Holy Bible*, as Contained in the Sacred Scripture of the Old and New...New York: Alex Hogg.

Kim, N. (2003). *Book Arts*. Seoul: Impress.

Lang, R.J. (2003). *Origami Design Secrets: Mathematical methods for an ancients Art*. Natick: A K Peters.

Logman, T. (2005). *How to read Genesis*. Madison: InterVarsity Press.

Meggs, P.B (1983). *A History of Graphic Design*. Hoboken, New Jersey: John Wiley & Sons Inc.

Nguyen, D. (2004). *Under the Sea Origami*. New York: Sterling Publishing.

Nguyen, D. (2006). *Origami Birds*. New York: Sterling Publishing.

Old Testament, genesis. (n.d), The Brick Testament. Retrieved February 5, 2007 from <http://www.thebricktestament.com/>

Phillips, J. (n.d.). *Exploring the Scripture: AN overview of the Bible from Genesis to Revelation*. Retrieved August 6, 2008 from http://books.google.co.nz/books?id=a8sxRS-YyCMC&dq=bible+genesis&printsec=frontcover&source=bl&ots=UeZx9HdNoo&sig=fDvFbot__66KEYyTfASKAxWSpGU&hl=en&ei=8cULSoOMEIS8tgPDnL2IAw&sa=X&oi=book_result&ct=result&resnum=9#PPA15,M1

Porter, J.R. (2007). *The Illustrated Guide to the Bible*. London: Duncan Baird Publishers.

Poynor, R. (2006). *Evil Genius*. Print, 6, 50 – 57.

Quaknin, M.A. (1995). *Symbols of Judaism*. Assoulin: Paris

8. Bibliography

- Ramey, W. D. (1997). *Literary Analysis of Genesis*. Retrieved February 3, 2007 from http://www.inthebeginning.org/chiasmus/xfiles/xgen1_1-2_3.pdf
- Ross, H. (2001) *Scientists Tests the Holy Books of Major Religion*. iamnext. Retrieved February 3, 2007 from <http://www.iamnext.com/spirituality/texttest.html>
- Shigeru Ban Architects. (2009). Retrieved August 19, 2008 from <http://www.shigerubanarchitects.com>
- Smith, K. A. (2000). *200 Books: An Annotated Bibliography*. New York. Keith a Smith Books.
- Smith, K. A. (1999). *Non-Adhesive Binding Books without Paste or Glue*. New York. Sigma Foundation.
- Smith, K. A. (2003). *The New Structure of the Visual Book (with 200 more pages)*. New York. Keith a Smith Books.
- Smith, K. A. (2003). *The New Text in the Book Format*. New York. Keith a Smith Books.
- Stoddart, J. (1998). *Ruskin's Culture Wars*. Charlottesville, Virginia: University press of Virginia.
- The Ten Bestselling Books of All-Time*. (n.d.). Retrieved August 5, 2008 from <http://home.comcast.net/~antaylor1/bestsellingbooks.html>
- The Ultimate Assertion*. (2003). Retrieved July 23, 2008 from <http://homepage.virgin.net/vernon.jenkins/Evidences.htm>
- Umberto, E. (1994). *The limits of interpretation*. Bloomington: Indiana University Press.
- Verlag, P.D. (2008). *Essential Visual History of the Bible*. Washington: National Geographic Society.
- William, N. (2005). *More Paperwork*. London: Phaidon Press.
- Wilson, I. (1999). *The Bible is History*. London: The Origion Publishing Group.

8. Bibliography

List of Images

Image 1:

Seoul Design Festival 2008. (n.d.). *Exhibitor* Retrieved January 24, 2009 from <http://www.designfestival.co.kr/eng/exhibit/company.asp>

Image 11:

ssahn.com. (2004). *Lu Jingren*. Retrieved July 6 2009 from <http://www.ssahn.com>

Image 13:

ssahn.com. (2004). *Zhu Yingchun*. Retrieved July 6 2009 from <http://www.ssahn.com>

Image 15, 16 & 17:

Wikipedia. (2009). *Book of Kells*. Retrieved January 24, 2009 from http://en.wikipedia.org/wiki/Book_of_Kells

Image 18 & 19:

Bookbinders Workshop, Inc. (2008). Retrieved January 24, 2009 from <http://blog.bookbindersworkshop.com/2009/04/02/new-lost-gutenberg-bible-photos.aspx>

Image 21:

Jenkins, V. (2007). *Reading Hebrew words as numbers*. Retrieved July 23, 2008 from <http://www.whatabeginning.com/Misc/Pyrotechnics/HebNums>

Image 22:

The Ultimate Assertion. (2003). Retrieved July 23, 2008 from <http://homepage.virgin.net/vernon.jenkins/Evidences.htm>

Image 23, 24, 25 & 26:

Shigeru Ban Architects. (2009). Retrieved August 19, 2008 from <http://www.shigerubanarchitects.com>

8. Bibliography

List of Diagrams

Image 1:

Religionfacts. (2004). *Comparison of Islam, Judaism and Christianity*. Retrieved May 3, 2009 from http://www.religionfacts.com/islam/comparison_charts/islam_judaism_christianity.htm

Image 10:

Wikipedia. (2009). *Book Structure*. Retrieved November 29, 2008 from <http://en.wikipedia.org/wiki/Book>

9. Appendix

The Ultimate Assertion:

בראשית ברא אלהים את השמים ואת הארץ :
 .earth the and heavens the God created beginning the In

EVIDENCE OF SUPERNATURAL DESIGN IN THE DIVINE PROLOGUE

The opening verse of the Judaeo-Christian scriptures must be regarded as the most remarkable combination of words ever written - and for reasons that include the following:

1) The Hebrew words (reading right to left) may be alternatively, and [fairly](#), read as a set of 7 natural numbers, thus:



Fig. 1

Above the text we have the values assigned to the letters - following the historically attested scheme of [alphabetic numeration](#). Recorded below are the totals which represent the values of the words (now interpreted as strings of numerals). Observe that the 4th (and central) word is not translated as it indicates here that the following noun is the definite and direct object of the transitive verb.

The verse total (ie the sum of the 7 word values) is **2701**, or **37 x 73** (an interesting case of digit symmetry). It is worth observing that the number of letters in this first verse is **28** (2nd perfect number) - the first word having **6** (1st perfect number). All known perfect numbers are even and triangular; **6** (= 1+2+3) is the 3rd triangular, and **28** (=1+2+3+4+5+6+7) is the 7th.

2) There are a number of geometries associated with **2701** - the numerical expression of Genesis 1:1 - thus:

- Most obviously, the 37 x 73 rectangle:

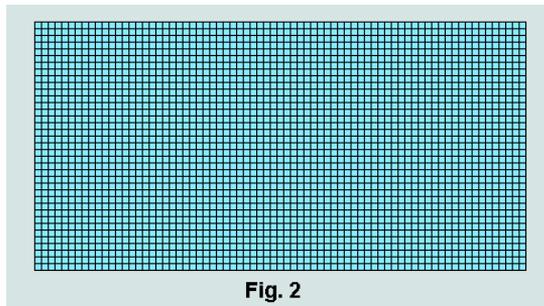
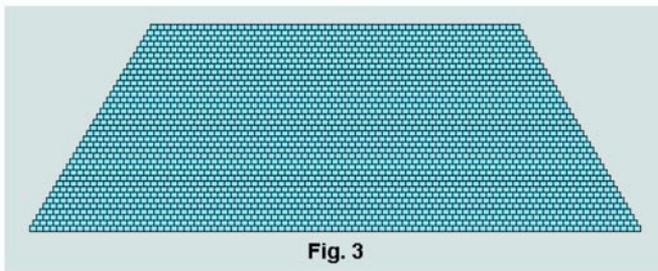


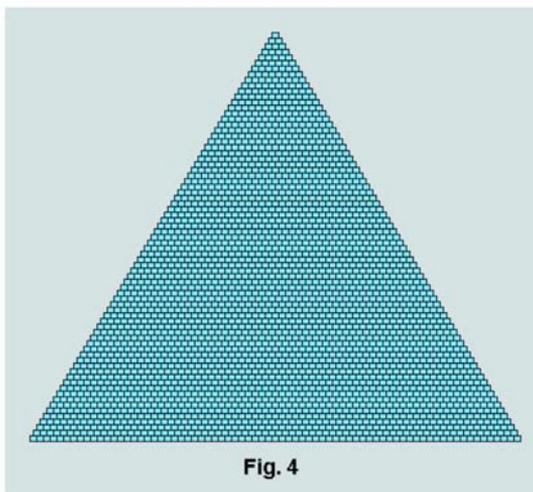
Fig. 2

Appendix 1: Ultimate Assertion

- The 37 x (55 + 91)/2 trapezium:

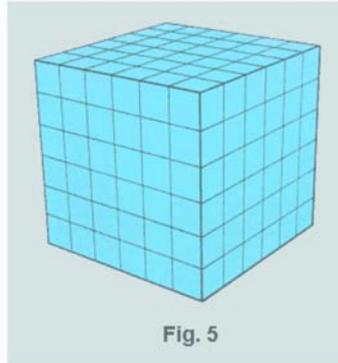


- The 73rd triangle:



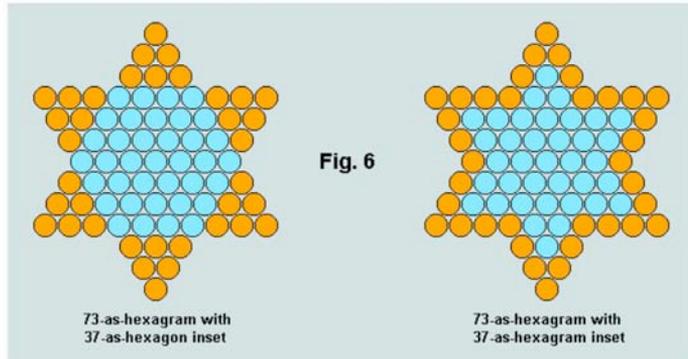
3) Observe that the outline of each of the foregoing figures comprises **216**, or $6 \times 6 \times 6$ counters; assuming these to be unit cubes (as implied in Fig. 2), they may be stacked to create the unique cube depicted below:

Appendix 1: Ultimate Assertion

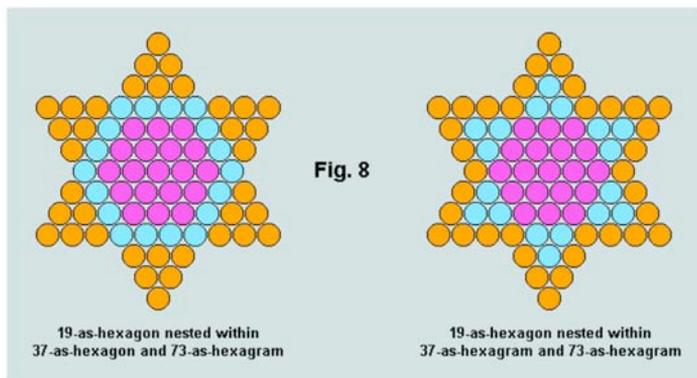


This is the only cube whose superficial area is numerically equal its volume.

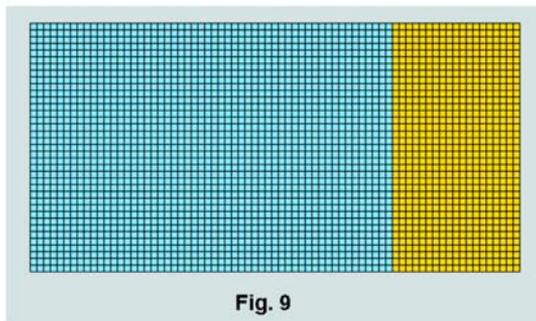
4) At this point in the proceedings something more needs to be said about the prime numbers, **37** and **73** - factors of Genesis 1:1. As it turns out, they are related geometrically in two distinct ways. The facts are presented in Fig. 6.



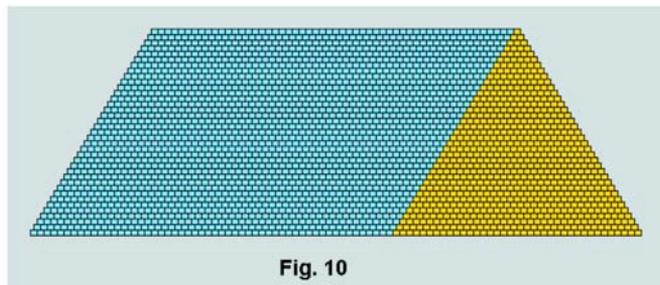
It follows, therefore, that there are yet further ways of representing this verse pictorially. Of particular interest is the 'star of stars', ie **73-as-hexagram** formed from units of the related **37-as-hexagram**, thus:



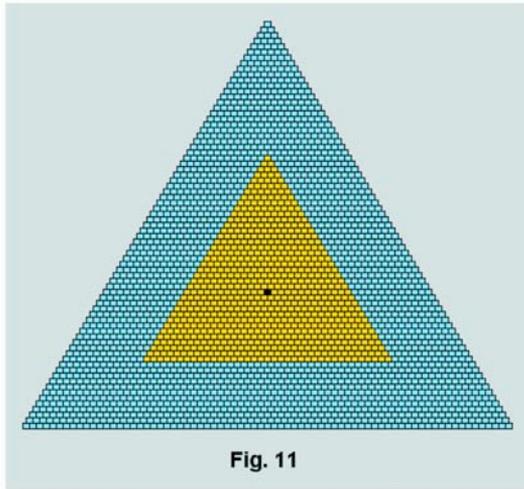
- 703 itself may assume different geometrical forms - all compatible with those representing the complete verse, thus:



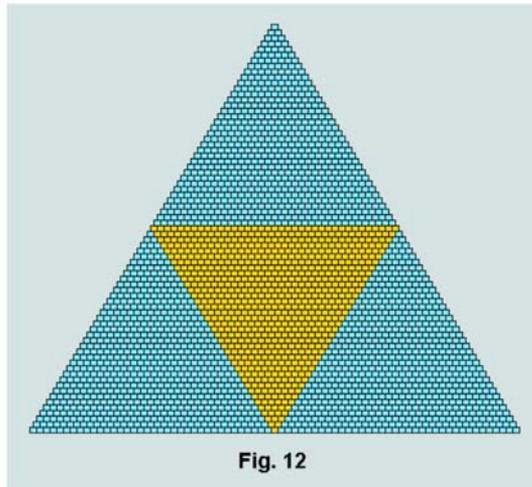
This diagram reveals a natural division within the verse - the blue rectangle of 1998 units representing the sum of words 1 - 5, and the orange rectangle the sum of words 6 and 7.



Here, it is revealed that **703** is **37th** triangular number (coloured orange) - the blue parallelogram representing the sum of the first 5 words.



The **37th** triangle (value, **703**) is here shown centred within the triangle representing the complete verse, viz **2701**. Rotating the inner triangle through 180 degrees about the common centre (rendered black), we make a significant discovery:

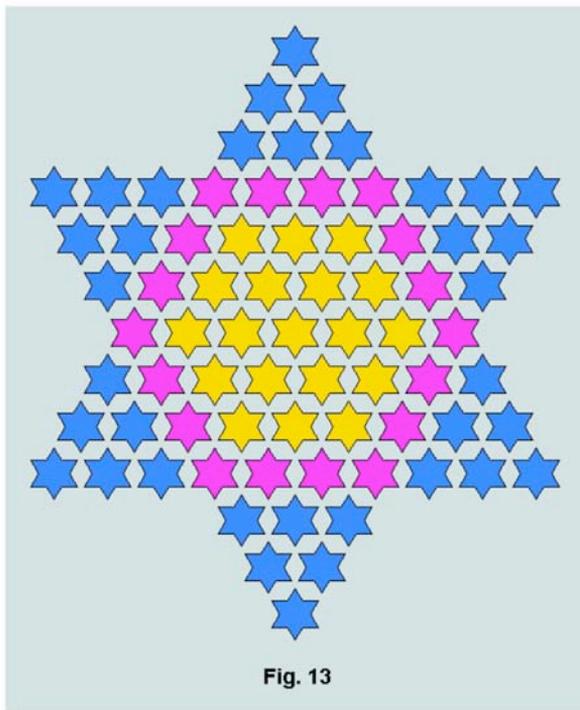


Observe the geometrical compatibility here; also the fact that each of the 3 blue triangles has the value **666** - a

Appendix 1: Ultimate Assertion

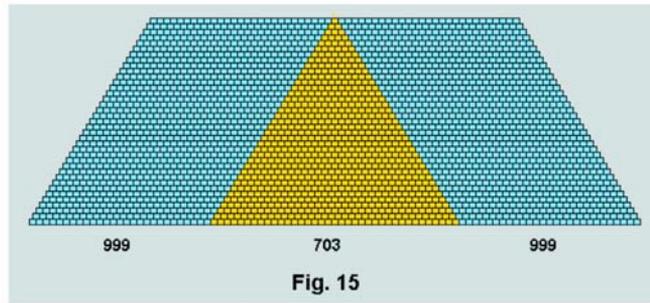
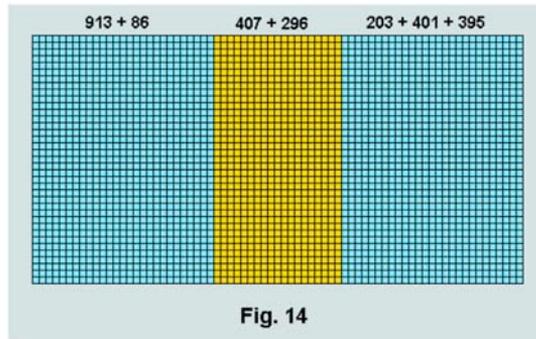
number that Christians meet with [elsewhere](#).

Finally under this heading, here is how **703** appears as a symmetrical hexagon within the 'star of stars' expression of Genesis 1:1:

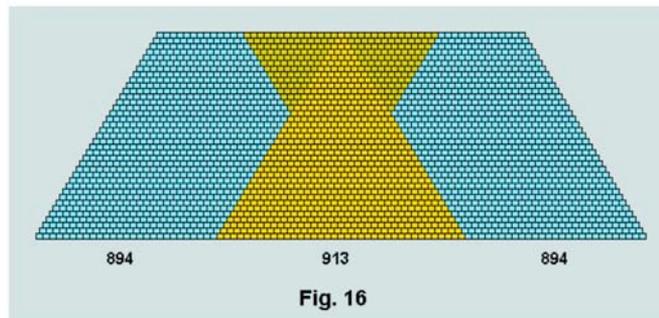


It will be remembered that the 73 'star' units in this figure each represent **37-as-hexagram**. The inner hexagon of 19 thus represent **703** (ie the sum of words 6 and 7), and the hexagonal ring of 18 (coloured purple), **666**.

- But further insights arise. For example, the sum of words 1 and 3 (ie **913** and **86**) = **999** - as does the sum of words 2, 4 and 5 (ie **203**, **401** and **395**). These facts can now be incorporated into the Figs. 9 and 10 with telling effect, thus:



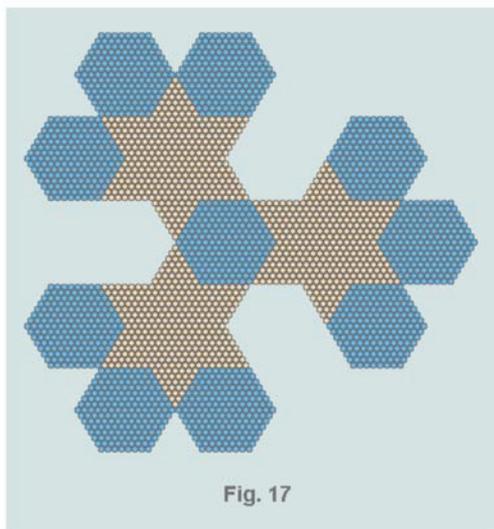
- Again, it may be observed that when the first word, **913**, is temporarily removed from the scene the remainder divide evenly as follows: $203 + 395 + 296$ (representing words 2, 5 and 7) = $86 + 401 + 407$ (representing words 3, 4 and 6) = **894**. This result is best depicted within the foregoing trapezium - the difference ($999 - 894$) being **105** - another triangular number (the 14th). Here, then, is the revised version of Fig.15:



The involvement of the 14th triangle (**105**) has the added significance that its double, **210**, is also triangular (the 20th). This is a rare phenomenon in the infinite series of triangles.

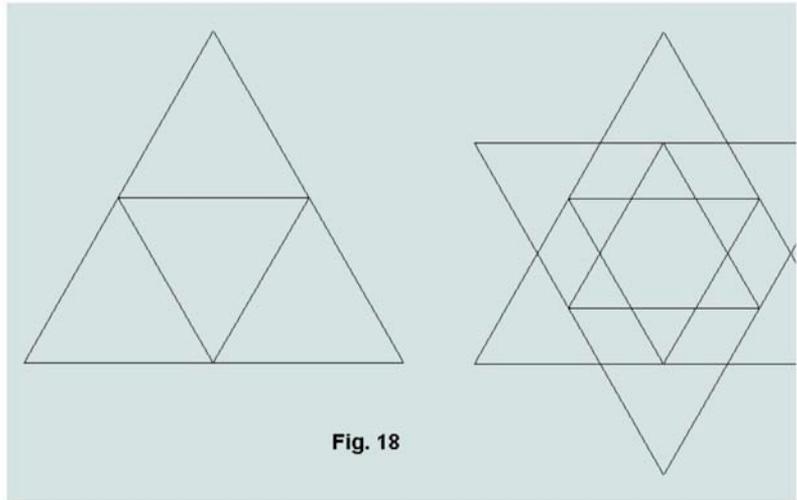
Appendix 1: Ultimate Assertion

- A further interesting observation concerns the respective totals of the odd and even words. Thus, $913 + 86 + 395 + 296 = 1690 = 10 \times 169 = 10 \times 8\text{th hexagon}$; and $203 + 401 + 407 = 1011 = 3 \times 8\text{th hexagon}$. Clearly, these figures tessellate; one significant arrangement takes the form of the trefoil depicted below.

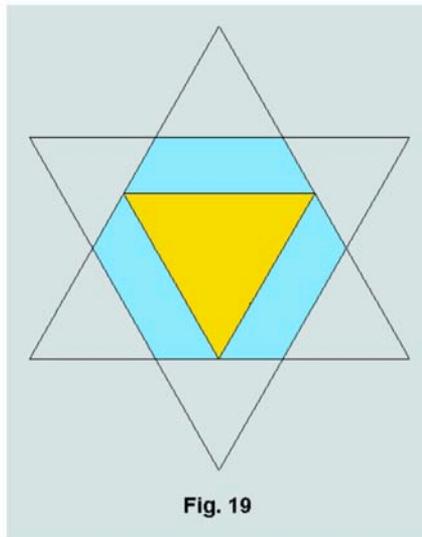


The total number of counters involved here is obviously **2701**. So the list of symmetrical representations of the Bible's first verse is further, and remarkably, extended.

6) Because the triangular form of Genesis 1:1 has a centroid counter (a feature shared by only 1 in 3 triangular numbers) it is capable of uniting with an inverted copy of itself to yield a hexagon (by intersection) and a hexagram (by union). The following diagram illustrates the principle as it is applied to Fig.12 above:



It may be observed that the inner triangle (representing the sum of the two final words of the verse) is also a 'generator' triangle in this sense. A particularly significant outcome of this operation concerns the hexagon so generated with triangle inset. To clarify the discussion, these features are made the focus of attention in the following diagram.



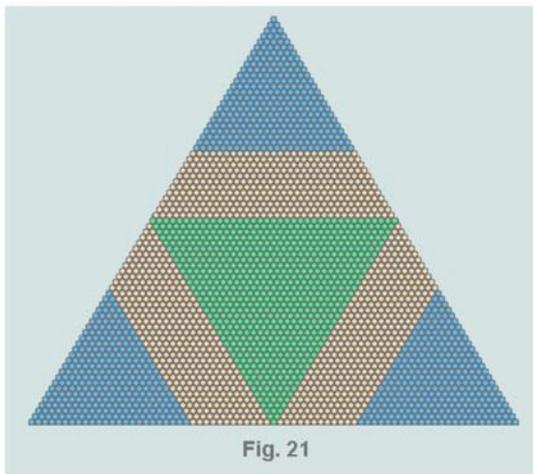
The value of the triangle is of course known to be **703** (ie 407 + 296). That of the hexagon is **1801** - a direct consequence of the generating triangle being **2701**.

At this point, let us look again at the Bible's opening Hebrew words - but now including the first of the second verse:

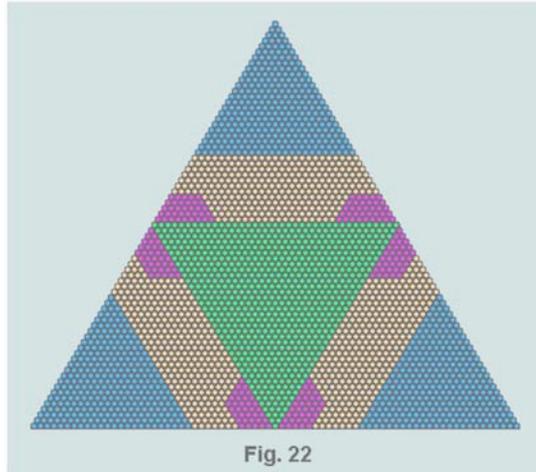


Clearly, read as a number this 8th word of Scripture is **302**. Observe now the sequence of words 4 - 8 (within which the triangle **703** resides as words 6 + 7); they total **1801**, ie the value of the hexagon derived from the self-intersection of **2701-as-triangle**. This sequence of words confirms, therefore, what we actually see in the geometry. Again, it should not pass unnoticed that the sum of words 4 and 8 is also **703**, and that the total for the now augmented first verse is **3003** - the 77th triangular number. It follows from this last observation that the 8th word functions as a perfect numerical 'plinth' for Genesis 1:1.

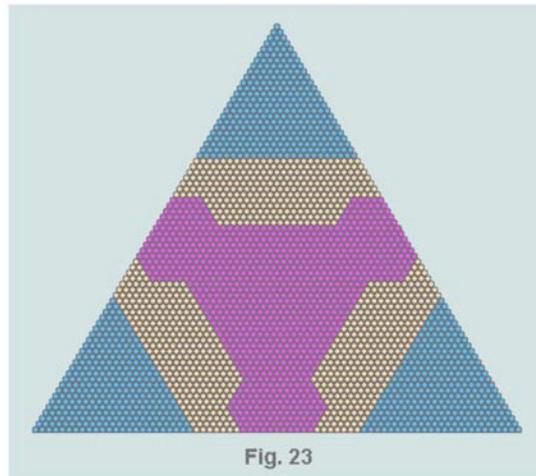
7) Further concerning **1801** - the hexagon inscribing **2701-as-triangle** - observe that it is also generated within Genesis 1:1 as the sum of words 1, 3, 5 and 6 (ie 913 + 86 + 395 + 407), and has an outline of 144, or 12^2 . As demonstrated in Figure 16, **913** (the Bible's first word) may be regarded as the sum of 2 or 3 triangles, thus: **913** = **703** + **210**, or **703** + **105** + **105**. The following diagram reiterates the basis of a significant development based on these facts:



The trapezia rendered orange each comprise **366** counters, ie $(1801 - 703)/3$. Observe that **703-as-triangle** may be converted into **913** - and without loss of symmetry - by attaching 6 equal trapezia, each of value **35**, in the manner shown below:



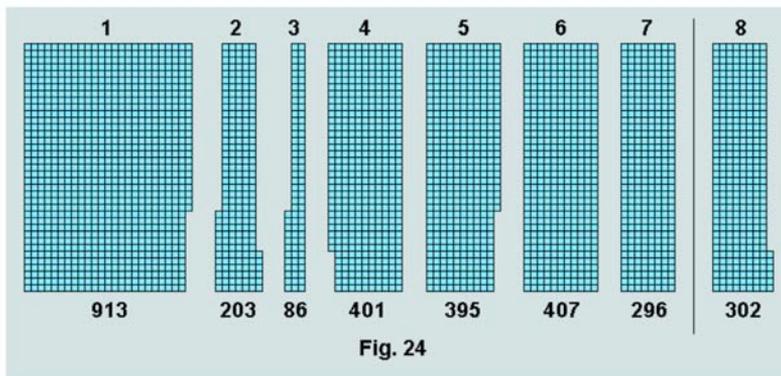
Clearly, the centre of the figure (representing the Bible's first verse) is dominated by a symmetrical representation of **913** (the Bible's first word), thus:



Significantly, each of the areas rendered orange comprises **296** counters - **296** being the last of the 7 words of Genesis 1:1. In total, therefore, they represent **888** counters. This happens to be the numerical reading of the name '[Jesus](#)' from the Greek, nominative case ('Christ' being **1480**, or **5 x 296**). How appropriate then that He who is said to have created all things (eg John 1:3) is here seen to be associated with 'the earth' and to share a central position with the Bible's first word within the Bible's first verse!

Appendix 1: Ultimate Assertion

8) Finally, let us take a look at the geometries of the individual words. As the following diagram reveals, these display the features of a set of jigsaw pieces when confined within the limits of the rectangular form of Genesis 1:1 (Fig.2), thus:



The height of each of these figures is 37 units. Observe that each of the short projecting spurs on words 1 - 5, together with their respective recesses, are multiples of 6 (words 6 and 7 are, of course, multiples of 37 - hence, spurless). Note also that word 8 follows the same pattern. Clearly, many multiples of 37 may be created by combining two or more interlocking pieces. In fact, in respect of Genesis 1:1, 23 of the possible 127 unique combinations are multiples of 37, whereas the expectation for a random set is only 3 or so.

9) So the big questions are, "Who is responsible for encapsulating so much mathematical detail into the 7 Hebrew words of this powerful and fundamental assertion? And why?" It should be clearly understood by those attempting to formulate rational answers to these questions that the testimony of the coordinated numerical geometries, briefly explored here, is considerably enhanced by the many other numerical wonders detailed at the website referenced below; further, that these features were 'set in stone' millennia before the invention of the Hebrew alphabetic numbering scheme!

Vernon Jenkins MSc

Created: 2003-01-25

Modified: 2003-02-10

<http://www.otherbiblecode.com>

[email: vernon.jenkins@virgin.net](mailto:vernon.jenkins@virgin.net)

Appendix 2: Interview Transcriptions

Interview transcription 1.

Interviewer: Hana Park

Interviewee: Grace Ryu

Date of interview: 2nd July 2009

The interviewee was seating alone in a room and given 30 minutes to experience the book before the interview.

Grace Ryu is a member of Presbyterian Church of Aotearoa NZ. As a Pastor of the target audience Grace Ryu was asked to comment on:

User navigation

Q1. Was the book easy to understand?

A1. Yes. I think this book can be targeted to the new believers. This book is well transferred metaphysically from the words to the visual object. The visual transcription is always a strong tool for the new believers or children.

Q2. Was the experience of the book easy to follow?

A2. Yes. I have followed the instruction book and it was easy to understand and easy to access. The message was clearly delivered. The individual experience of this book was easy enough to follow. I think this book can be an enjoyable activity for the family or home group so they can share the experiences of the creation account and also this book can be used for educational material for the Sunday school.

Appendix 2: Interview Transcriptions

Q3. How do you think about the corresponding elements?

(Day 1 – Day4, Day2 – Day5, Day3-Day6)

A3. I think it is a chronology. It gives the chance to understand the joint relationship of the regiment that one has been completed and is extended to accomplish. It gives the opportunity to the readers to create the third object for their own style and I think to give them a chance to make their own creation makes this book more personal.

Q4. What was the weakest experience?

A4. I think LED light doesn't work well with other experiences. All other experiences were very appreciable and sensible, but the LED feels cold and mechanized.

Aesthetic style

Q5. What do you think overall visual style of the book?

A5. I satisfied with the size of the boxes. It is easy to hold and easy to handle. White looks strong and pure. I have found there is no text and I think it is a strong aspect for this book because the book can be experienced someone who can't read or can't understand English. I like small diagrams on the instruction book that helps me to indicate how to experience the book.

Q6. How do you feel about the paper has been used for core material? And white has been used entire book. How do you feel about the white?

A6. I think it is very eco-friendly project. The global warming is a rising issue to the ecotheologists. I think the pure white that you have used for this project has metaphorical meaning, which gives the chance to consider the nature, the environment that God created the universe as clean as pure white.

Appendix 2: Interview Transcriptions

Q7. What was the weakest aspect of the visual style?

A7. I think the paper and the white are the strongest aspect of the book but in the same time I feel they are the weakest aspects because the durability of the paper and the white looks attractive, but on the other hand it might look boring.

Spiritual integration

Q7. The aim of this project was to develop a book that encourages engagement in both physical and spiritual interactions. Did you find this book has encouraged you to engage in physical and spiritual interactions?

A7. Yes. I believe the experience that stimulates the five senses becomes a part of memory and it was a strong aspect that the book gave me an opportunity to create my own interpretation of creation account, which makes me appreciate this book more personally.

Final comment

This book is a practical tool for the believers and non-believers that stimulates the sensual engagement with the viewer and the contents without a word.

Further suggestions

The refills could be an ideal option for continuous usage.

Appendix 2: Interview Transcriptions

Project Title: In the Beginning

Consent Form

I have read the cover letter and have had the details of the study explained to me.

I understand I have the right to withdraw from the study at anytime and to decline to answer any particular questions.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission.

I agree to the interviews being audio taped. I also understand I have the right to ask for the audiotape to be turned off at any time during the interview.

I agree to participate in this study under the conditions set out in the covering letter.

Singed:

Name:

Date:

Appendix 2: Interview Transcriptions

Interview transcription 2

Interviewer: Hana Park

Interviewee: Seoung Joo Nam

Date of interview: 9th July 2009

Seoung is a Master student in Biology at Auckland University. As a person who doesn't have any design background of the target audience Seoung was asked to comment on:

User navigation

Q1. Was the book easy to understand?

A1. Yes, but after reading the instruction book. It will be quite hard to understand without the instruction book.

Q2. Was the experience of the book easy to follow?

A2. Generally yes, in particular, the folding was very interesting. But I am not sure about the second day's experience. I don't quite get what you trying to say and there is no active experience that I could try.

Q3. How do you find the corresponding elements?
(Day 1 – Day4, Day2 – Day5, Day3-Day6)

A3. I knew that they were relevant and I am really impressed you have pulled the two corresponding elements together which makes it really good. But the day2 and day 5 doesn't work quite well.

Appendix 2: Interview Transcriptions

Q4. What was the strongest experience?

A4. The strongest experience was the folding. It was very interesting experience as I said earlier. It might be more interesting if you have included other instructions of birds and fishes that can be folded.

Q5. What was the weakest experience?

A5. The weakest experience was the day three. The threads look like hair and it looks a bit scary to me.

Aesthetic style

Q6. What do you think overall visual style of the book?

A6. I think overall looks good except the second day and the third day. The second day was hard to notice the colour difference and the third day feels untidy with coloured threads.

Q7. How do you feel about the paper has been used for core material? And white has been used entire book. How do you feel about the white?

A7. I think the white looks good. It feels calm and warm.

Q8. What was the strongest aspect of the visual style?

A8. I still think the folding was the strongest experience and it looks good.

Appendix 2: Interview Transcriptions

Q9. What was the weakest aspect of the visual style?

A9. I think the weakest was the second day, it was hard to notice the colour difference and the handmade paper feels different than any other experience.

Spiritual integration

Q10. The aim of this project was develop a book that encourages engagement in both physical and spiritual interactions. Did you find this book have been encouraged you to engage in physical and spiritual interactions?

A10. The physical experiences, such as the folding and needlework help me to remember the creation story. I can't really say that the book encourages engagement in spiritual interaction but the book encourages remembering the content.

These experiences could be used in many different ways – independently, one on one or in a group, where you could share about what you have experienced I thought that was very good aspect of this Book.

Appendix 2: Interview Transcriptions

Project Title: In the Beginning

Consent Form

I have read the cover letter and have had the details of the study explained to me.

I understand I have the right to withdraw from the study at anytime and to decline to answer any particular questions.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission.

I agree to the interviews being audio taped. I also understand I have the right to ask for the audiotape to be turned off at any time during the interview.

I agree to participate in this study under the conditions set out in the covering letter.

Singed:

Name:

Date:

