

# **Artificial Intelligence in the Bible**

By

Mark McGee

Do we find Artificial Intelligence (AI) in the Bible?

I believe we do.

The objective of this new series is to see the role AI plays in the eternal plan of God.

## Intelligence

Let's begin by defining "intelligence" and seeing what types of intelligence are revealed in the Bible.

'the ability to learn or understand or to deal with new or trying situations ... the ability to apply knowledge to manipulate one's environment or to think abstractly as measured by objective criteria (such as tests)' Merriam-Webster

'the ability to acquire and apply knowledge and skills' Oxford Languages

In the Bible

## Intelligence in the Bible

We find three types of intelligence in the Bible:

- 1. Supernatural Intelligence
- 2. Natural Intelligence
- 3. Artificial Intelligence

The Bible introduces us to "supernatural" intelligence first:

In the beginning God created the heavens and the earth. The earth was without form, and void; and darkness was on the face of the deep. And the Spirit of God was hovering over the face of the waters. Genesis 1:1-2

The Bible introduces us to "natural" intelligence next:

Then God said, 'Let Us make man in Our image, according to Our likeness; let them have dominion over the fish of the sea, over the birds of the air, and over the cattle, over all the earth and over every creeping thing that creeps on the earth.' So God created man in His own image; in the image of God He created him; male and female He created them. Then God blessed them, and God said to them, 'Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth.' Genesis 1:26-28

God has all knowledge (He is Omniscient) and is the Intelligence of the universe. All intelligence comes from God.

For the Lord is the God of knowledge. 1 Samuel 2:3

For if our heart condemns us, God is greater than our heart, and knows all things. 1 John 3:20

We find God and angelic beings (Supernatural intelligence) interacting with humans (natural intelligence) throughout the Bible. So, where do we find "artificial" intelligence in the Bible? Let's begin by learning a little about AI.



Artificial Intelligence is "the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages." (Oxford Languages) "Artificial intelligence leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind." (IBM)

I began writing about AI in 1968. That was the year I started as a broadcast journalist. I remember visiting a local bank that had installed massive IBM mainframe computers to record customer financial records. They called it their "Data Processing Center." One side of a giant room was filled with large computers that had magnetic tape reels recording and storing information. The other side of the room had bank employees adding information to computer punch cards and printing information on continuous form paper.

I researched the history of computers for news stories and it took me back to 1801 and Frenchman Joseph Marie Jacquard. I also came across the names of Charles Babbage, Herman Hollerith, Alan Turing, David Packard and Bill Hewlett, J.V. Atanasoff and Clifford Berry, John Mauchly and J. Presper Eckert, Grace Hopper, Thomas Johnson Watson Jr., John Backus, Jack Kilby, Robert Noyce and Douglas Engelbart. While all of those people played important roles in the development of computers, I found Alan Turing to be one of the most interesting.

A.M. Turing was a British mathematician who made a name for himself in the 1930s and 40s with his ideas for "automatic machines." Turing is credited by some historians with shortening World War II by pioneering technology the decrypted secret Nazi communications. The machine he developed was known as the *Bombe*. Turing asked a very simple question to arrive at his development – Can machines think? That question and the answers he developed led to what became known as the Turing Machine and later as computers and artificial intelligence. You can read more about Turing's ideas here.

I continued to cover the development of mainframe computers and other "learning machines" for the next 40+ years. That included operating systems, software, data memory and sharing, the ethernet, mini-computers, personal computers and mobile computing devices. From a news coverage perspective, I saw us go from manual typewriters and carrying dimes around all day to call the newsroom from pay phones to a completely digital newsroom with laptop computers and Blackberry phones for reporters in the field. That was a huge

change from 1968 to 2009, the year I retired. Today's reporters use iPads and iPhones in the field. Even more growth in the last twelve years. What will the future hold?

## Al in the Early 2000s



After completing a book about martial arts I talked with my publisher about a book that would look at the history of humanity's quest for immortality. I researched a variety of topics in four primary categories for a few years and wrote *A History of Man's Quest for Immortality*. The 784-page book published in 2007. The third category (section) of the book is titled "The Science of Immortality" and included what was then up-to-date information about Artificial Intelligence. Here are

several quotes from the book that look at the history of AI as it stood 15 years ago.

Ray Kurzweil is well known for being an enthusiastic futurist. He has written many books and essays about the potential for human engineering that could extend human life by hundreds of years and eventually lead to unending physical life (immortality). His books deal with many of the subjects important to Immortality Science: artificial intelligence, robotics, nanotechnology, genetics, and transhumanism. Kurzweil's first book was titled "The Age of Intelligent Machines (1990) and dealt with Artificial Intelligence (AI). He also wrote The 10% Solution for a Healthy Life (1994), The Age of Spiritual Machines: When Computers Exceed Human Intelligence (1999), Fantastic Voyage: Live Long Enough to Live Forever (2004) and The Singularity is Near: When Humans Transcend Biology (2005).

Kurzweil is concerned about living long enough to live forever. He believes humanity will walk the road to Immortality over what he calls 'Three Bridges.' The first bridge is staying healthy long enough to get to the second bridge ... The second bridge is the biotechnical revolution that will allow humans to control their own genes by blocking genes that cause disease and promoting new genes that will slow and eventually stop the aging process. The third bridge is a combination of nanotechnology and artificial intelligence. Kurzweil believes the day is coming when scientists will be able to introduce millions of cellsized robots (nanobots) into the human blood stream that will repair arteries, bones, muscles and brain cells. He also sees the day when people will be able to download improvements to their genetic coding from the Internet ... He won the 1999 National Medal of TeXchnology Award and was inducted into the Inventors Hall of Fame in 2002. p 55

Al (artificial intelligence) has been defined as the "science and engineering of making intelligent machines" (John McCarthy, Stanford University). Computer programs that imitate human thinking is another way to explain the concept of Al. The programs can often solve problems much faster than humans with a lower error factor (often called "expert systems"). p 56

Work with AI technology exploded during the 1980s and 1990s as scientists worked together to advance their work. The American Association for Artificial Intelligence (AAAI) was started in 1979 by some of the leaders of early AI technology. They included John McCarthy, Allen Newell, Marvin Minsky and Edward Feigenbaum. The stated purpose of AAAI is it's "a nonprofit scientific society devoted to advancing the scientific understanding of the mechanisms underlying thought and intelligent behavior and their embodiment in machines. AAI also aims to increase public understanding of artificial intelligence, improve the teaching and training of AI practitioners, and provide guidance for research planners and funders

concerning the importance and potential of current Al developments and future directions" (American Association for Artificial Intelligence, 2006). p 57

Bruce J. Klein is an immortalist. He co-founded the Immortality Institute in 2002. Klein is also President of Novamente LLC, a Maryland software company focusing on Artificial General Intelligence (AGI). He presents the goal of AGI as being 'the creation of broad human-like and transhuman intelligence, rather than narrowly smart systems that can operate only as tools for human operators in well- defined domains.' Klein believes 'the best way to deal with the terror of death and oblivion is to live forever.' He defines the immortalist's philosophy as 'humans only have one life and one chance to live. There are no alternative states to the current state other than oblivion. Thus, what we experience now and the life we have now is the only alternative ... We only die – no afterlife, no second chances, no reincarnation. Thus, this only leaves us with one simple option – embrace life." The stated mission of the Immortality Institute is to 'conquer the blight of involuntary

death.' Klein believes in the ever-expanding lifespan. He points to increased lifespans during the past 200 years and quotes Dr. Ronald Klatz of the American Academy of Anti-Aging Medicine who believes the lifespan of baby boomers could reach 120 years ouf age and the generation after them could approach 150 years. pp 67-68

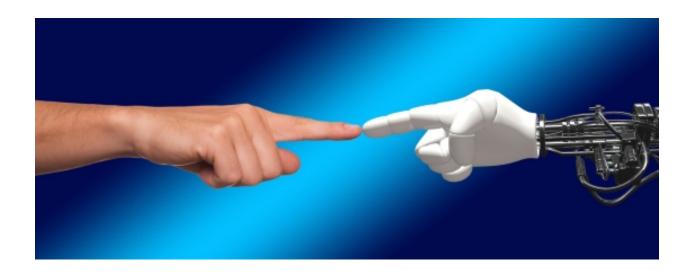
In the April 7, 2000 edition of Science Magazine, John Harris wrote about the Intimations of Immortality. He pointed to new research (at that time) that showed aging and death might not be inevitable. He wrote about cloned human embryonic stem cells that could constantly regenerate organs and tissues and switching off genes that trigger aging. Harris believes life can be extended beyond the outer limits of current death (beyond 120 years) and that the moral and ethical aspects of it should be discussed now. He presented the real possibility that only a wealthier class of people might be able to afford the medical technology leading to immortality, presenting the world with the possibility of mortals and immortals living together, leading to new social pressures. p 69

Many of the concepts and technologies considered in this study for possible use in future space missions are elements of a diverse field of research known as 'artificial intelligence' or simply Al. The term has no universally accepted definition or list of component sub-disciplines, but is commonly understood to refer to the study of thinking and perceiving as general information processing functions - the science of intelligence. Although, in the words of one researcher, 'It is completely unimportant to the theory of Al who is doing the thinking, man or computer' (Nilsson, 1974), the historical development of the field has followed largely an empirical and engineering approach. In the past few decades, computer systems have been programmed to prove theoremPs, diagnose diseases, assemble mechanical equipment using a robot hand, play games such as chess and backgammon, solve differential equations, analyze the structure of complex organic molecules from mass-spectrogram data, pilot vehicles across terrain of limited complexity, analyze electronic circuits, understand simple human speech and natural language text, and even write computer programs

according to formal specifications — all of which are analogous to human mental activities usually said to require some measure of "intelligence." If a general theory of intelligence eventually emerges from the AI field, it could help guide the design of intelligent machines as well as illuminate various aspects of rational behavior as it occurs in humans and other animals. Robert A. Freitas Jr., NASA Researcher, p 72

You'll find more about the topic in *A History of Man's Quest for Immortality*.

# **Al Today**



It's been 15 years since the publication of *A History of Man's Quest for Immortality* where we described the status of AI research at that time. How about today? It's amazing how much things have changed in just 15 years. With knowledge now doubling every day, we can see how quickly AI will grow in the coming months and years.

Types of AI are based on likeness to the human mind — ability to think and even "feel" human. AI systems include reactive machines, limited memory machines, theory of mind, and self-aware AI.

- Reactive machines older machine types that do have the ability to learn. Reactive machines are not memorybased. They are still in wide use today. Computers are an example of Reactive Machines.
- Limited memory machines current AI systems are capable of learning from data to make decisions. That includes learning from previous learned information. Limited memory machines use image recognition for both learning and how to solve problems in the future. Virtual assistants, self-driving vehicles and chatbots are examples of Limited Memory AI.
- Theory of Mind this is a next level for Al innovation. This is where Al would be able to discern human thought processes, emotions, beliefs and needs. Researchers are working on ways for Al machines to "understand" human beings. Most researchers believe they are many years from developing this type of Al machine.
- Self-aware AI this is a type of "self consciousness" where a machine would be "aware" of itself and be able to form a representation of itself. Alan Turing (LINK TO PART ONE) proposed a way of testing machines to

determine if they were capable of thinking like a human. Once known as the "imitation game," it is now called the Turing Test. Self-aware AI would be able to pass that test because it would "think" like a human. No AI has passed the Turing test to date, but many AI researchers believe that day may not be far off. Researchers believe they need to develop Theory of Mind machines before they'll be able to build Self-aware AI (also known as Artificial consciousness (AC), Machine Consciousness (MC) and Synthetic Consciousness (SC), including research into cognitive robotics).

Artificial intelligence algorithms are designed to make decisions, often using real-time data. They are unlike passive machines that are capable only of mechanical or predetermined responses. Using sensors, digital data, or remote inputs, they combine information from a variety of different sources, analyze the material instantly, and act on the insights derived from those data. With massive improvements in storage systems, processing speeds, and

analytic techniques, they are capable of tremendous sophistication in analysis and decision making. Brookings

## **Al and Supercomputers**

Remember *Deep Blue*? It was a supercomputer that played chess with then reigning world champion Gary Kasparov in the 1990s. Kasparov won the 1996, but lost the 1997 rematch making Deep Blue the first supercomputer to defeat a reigning world chess champion in a tournament. Even though that was the first time many people had heard the term "supercomputer," the term had been around for decades.

The word was first used in the 1920s for some IBM tabulators being used at Columbia University. The 1960s saw the development of the UNIVAC LARC, the CDC 1604, the IBM 7030, the ManchesterAtlas, and the CDC 6600. Some historians believe the U.S. Navy's IBM NORC was a type of supercomputer for its time. Computer scientists continued to

build faster and faster supercomputers in the 1970s, 80s, 90s and 2000s.

The processing speed of today's supercomputers are many times faster and play an important role in Al development. In just the past twenty years the speed of supercomputers has expanded from 7.226 TFLOPS for the IBM ASCI White supercomputer in 2000 to 415.53 PFLOPS for the Fugaku supercomputer in 2020. A petaflop (PFLOP) is a measurement of quadrillions of floating point operations per second. As fast as that sounds (and it does sound fast), the United States is working on next-generation machines that will be capable of computing at "exascale" speeds of 1 exaflop equaling one-thousand petaflops. The result could be a supercomputer that will be twice as fast as Japan's Fugaku. China is also working on an exascale supercomputer, but information about that development is secret. Many researchers believe China and the U.S. are developing exascale supercomputers for many purposes including military, industrial, cybersecurity, scientific and social.

IBM's Summit supercomputer is one of the world's most powerful and is owned by the U.S. government. Notice the part it's playing in AI.

The biggest problems in science require supercomputers of unprecedented capability. That's why the US Department of Energy's Oak Ridge National Laboratory (ORNL) launched Summit, a system 8 times more powerful than ORNL's previous top-ranked system Titan. Summit is providing scientists with incredible computing power to solve challenges in energy, artificial intelligence, human health, and other research areas, that were simply out of reach until now. These discoveries will help shape our understanding of the universe, bolster US economic competitiveness, and contribute to a better future. Oak Ridge National Laboratory



Researchers believe the increase in supercomputing speeds will play a big part in the future of AI, especially as supercomputers become faster. Supercomputers have already been used in AI research and plans are to use them more in the months and years to come. Supercomputers may eventually help researchers cross from Limited Memory Machines to Theory of Mind machines. That would then open the pathway to Self-aware AI.

# **Using Al**

Even though AI has been with us for decades, many business leaders are only now beginning to learn about it. Just five years ago, 15-hundred business leaders were asked about AI and only 17 percent said they were familiar with it (Deloitte, 2017). Many of the leaders who were familiar with AI were not clear how they could use it in their businesses. That was five years ago, so we can assume the percentage of business leaders who know about AI now has probably increased.

Most of us have some experience with artificial intelligence through:

- computers
- smart phones
- smart automobiles
- onboard navigation systems
- smart maps
- self-driving cars
- autonomous vehicles

- smart kitchens
- smart televisions
- smart air conditioners
- home security
- image analysis software
- video editing software
- gaming software
- virtual assistants
- digital personal assistant
- travel assistant
- social media
- · remote working
- remote learning
- marketing and advertising
- robotic assistance
- factory robotics
- humanoid robots
- Virtual Reality
- Augmented reality
- Metaverse
- web-connected vacuum cleaners

- weather warning apps
- · medical diagnosis and treatment
- drug development
- online banking
- finance and investment
- online shopping
- speech and facial recognition systems
- drones
- air travel
- web searches
- smart cities
- law enforcement

Do we find any of these Al aspects in the Bible?

#### Al in the Bible



Artificial Intelligence is basically "machines that can learn." Some people believe machine learning (ML) is a type of Al and say that true Al machines learn and imitate human behavior. Whatever simple definition we use the question remains, where do we find Al in the Bible?

The Bible covers a time period from "the beginning" (Genesis 1:1) to the end of time (Revelation 21:1 - 22:5). The physical writing of the Bible covers a time period from about 1450 BC to 97 AD. Both of those time periods are important as we answer our question.

Let's begin with the physical writing of the Bible (Old and New Testaments). Those dates, 1450 BC to 97 AD, fall into what we might call "ancient" times. Many historians believe "ancient times" ended with the fall of the Western Roman Empire in 476 AD and the beginning of what they call the "Middle Ages." With those dates in mind, what ancient machines do we find in the Bible that would fit the definition of "machines that learn and imitate human behavior?"

Simple ancient machines include levers, wheels, pulleys, axles, ramps (inclined plane), wedges and screws. People living in ancient times used a variety of materials available to them to make these "machines" including wood, stone, metal, clay, animal bones, plant fibers, etc. We see evidence of the availability of these materials in the early chapters of Genesis.

And as for Zillah, she also bore Tubal-Cain, an instructor of every craftsman in bronze and iron. Genesis 4:22

The term "craftsman" in Hebrew is <code>horês</code> and means "artificer" (fabricator). The word "bronze" is <code>nehoset</code> (copper, brass, bronze). The word "iron" is <code>barzel</code> (iron-ore, stone containing iron). The "Bronze Age" is estimated to have been from about 3300 BC to 1200 BC. The "Iron Age" is estimated to have been from about 1200 BC and 600 BC. What we see in Genesis 4:22 is that bronze and iron were both used by craftsmen well before the global Flood. They may have used bronze and iron tools to cut wood and stone to build houses and furniture, weapons and other items used in ancient times. Bronze is made from copper-ore and alloyed with tin. Iron is found in abundance in stone and rocks that are in the earth. Some iron comes from meteorites that fall from the sky.

Make yourself an ark of gopherwood; make rooms in the ark, and cover it inside and outside with pitch. Genesis 6:14

Humanity had become so wicked and violent that God decided to destroy everyone except for one man and his family. That man was Noah. God told Noah to build an "ark" (têbat – box, chest) of "gopherwood" ('ăsê gōper – wood from gopher tree). Some researchers believe gopher wood might have come from what we call cypress trees, but they are not positive about what tree was available to Noah before the global Flood. The gopherwood tree may even be extinct since Noah's time. The wood from the gopher tree would have been the right kind of wood to build a massive floating ark that would house Noah and his family and the animals, birds and insects God would bring to them and withstand the explosive change in weather caused by global flooding, earthquakes, volcanoes, tsunamis, etc. Noah would probably have used cutting tools that the craftsmen of his time made from bronze and iron. It may have been that Noah had skills in working with bronze and iron and may have made his own tools. Noah may have also used metal or wood nails and screws in the building process.

The word "pitch" is  $k\bar{o}per$  and means "ransom, satisfaction, covering." God told Noah to "cover" ( $\underline{k}\bar{a}part\bar{a}$  — cover over, pacify, propitiate, bitumen covering) the ark inside and outside with pitch. Pitch ( $k\bar{o}per$ ) is an organic byproduct of decomposed plants. It is waterproof, which would make it perfect to use it as a covering for the Ark inside and outside. Noah would have had easy access to a large quantity of pitch and he would need it for something as large as the Ark.

# **Building Cities**

We find people building cities within a couple of centuries of the end of the global Flood.

Cush begot Nimrod; he began to be a mighty one on the earth. He was a mighty hunter before the Lord; therefore it is said, 'Like Nimrod the mighty hunter before the Lord.' And the beginning of his kingdom was Babel, Erech, Accad, and Calneh, in the land of Shinar. From that land he went to Assyria and built Nineveh, Rehoboth Ir,

Calah, and Resen between Nineveh and Calah (that is the principal city). Genesis 10:8-12

Nimrod was a descendent of Noah and the first king on earth (the beginning of his "kingdom"). Noah and his sons would have still been alive (based on the ages of people listed in Genesis 11), so the knowledge of using bronze and iron to make tools for cutting wood and carving stone would have been known to Nimrod. Wood and stone were probably the building blocks he would have used to build his cities and the walls that would have protected the cities.

The first structure Nimrod and other members of Noah's extended family attempted to build in the land of Shinar was a ziggurat (stepped-pyramid). Notice the building materials they used:

Now the whole earth had one language and one speech. And it came to pass, as they journeyed from the east, that they found a plain in the land of Shinar, and they dwelt there. Then they said to one another, 'Come,

let us make bricks and bake them thoroughly. They had brick for stone, and they had asphalt for mortar. And they said, 'Come, let us build ourselves a city, and a tower whose top is in the heavens; let us make a name for ourselves, lest we be scattered abroad over the face of the whole earth. Genesis 11:1-4

Notice the building materials they used:

- brick for stone
- asphalt for mortar

Archaeologists have found that brick and stone were primary building materials thousands of years ago. Asphalt (bitumen) was used as mortar between bricks. It held bricks together and helped in waterproofing the construction. Wood, stones, bricks and other readily-available natural materials were used in construction for millennia and the history we find in the Bible demonstrates that fact. A variety of objects made from metals found in the earth were fashioned into the tools needed to shape wood, stones and bricks for building a wide

variety of buildings from houses to palaces, from city walls to pyramids.

## **War Machines**

King Nimrod was a "mighty one" (gibbor - strong, powerful, hero, champion) on the earth (Genesis 10:8). He was also a mighty "hunter" (sayid - game hunter). Nimrod was a skilled killer of animals which would help feed his family. But the fact that he was also viewed as a powerful hero and champion described his ability at another type of hunting. Nimrod hunted and killed people. That's how kings got and kept power. It's how they expanded their power. Nimrod probably lived for about four centuries (see Genesis 11 for comparison of Shem's lineage with Cush's lineage in Genesis 10), which would have given him the time to conquer most of Mesopotamia and build multiple cities. Archaeologists have uncovered some of those ancient cities and discovered evidence of powerful military dynasties. Nimrod and his descendants built cities that became city-states through military conquest and totalitarian rule.

How did Nimrod do that? Kings in ancient times were often great warriors who inspired men to fight with them and for them. Kings built armies equipped with war machines. What are some ancient war machines we find in the Bible?

The first described battle with multiple kings in the Bible is found in Genesis 14. Some of the kings won and some lost. The kings who won kidnapped Abram's (Abraham) nephew and family. When Abram heard about the attack and kidnapping, he armed 318 of his trained servants and chased after the kings. Abram divided his forces against them at night and attacked the kings. Abram won and rescued his nephew and family and brought back all the people and goods the kings had stolen. We're not told what weapons Abram and his servants used in the rescue, but it's an example of how training and arming an army of servants could defeat the armies of several kings.

Training was just one part of developing a "war machine" in ancient times. Another part was the use of horses and chariots to fight wars. A chariot was a type of carriage on wheels that was hooked up to two or more horses. It allowed for one or more soldiers to ride swiftly into battle and use a variety of weapons against their enemies. Those weapons included knives, swords, spears and bows and arrows. The first mention in the Bible refers to Joseph riding in a chariot in Egypt (Genesis 41). We see chariots mentioned several other places in the Bible (e.g. Exodus 14; Joshua 11; 1 Kings 4; Acts 8). It demonstrates that chariots were used during the entire time of the writing of the Bible. Very little changed during that time in how armies fought.

We also find "siegeworks" mentioned in the Bible. It's mentioned by Moses in Deuteronomy 20. Moses had trained in Egyptian-style warfare as a young man, so he would have learned how to conduct a successful siege. The Hebrew word is  $m\bar{a}$ , Ancient siegeworks were used in ancient warfare for thousands of years. Armies would set up "siege" strategies when they came against a city or fortress that would not

surrender and couldn't be taken quickly. Sieges included surrounding the city and blocking a way in or out of the city. The siege army could cut off resupply of provisions and troops. They could also use siege engines, battering rams and artillery attacks to instill fear in the citizens of the embattled city in addition to the possibility of the attacking army breaching the fortified city walls. Waiting out the opponents inside a city could last months and even years, so the attacking army had to be committed to that kind of warfare.

We find examples of a variety of army sieges in the Bible. The Egyptians, Assyrians, Babylonians, Persians, Greeks and Romans were well known for their siege strategies. Israel also used sieges in their warfare, but were often the nation under siege. Jerusalem and both of its Temples were destroyed following lengthy sieges by enemies of Israel. The Babylonians destroyed the First Temple and the city of Jerusalem in early part of the 6th century BC.

Now it came to pass in the ninth year of his reign, in the tenth month, on the tenth day of the month, that Nebuchadnezzar king of Babylon and all his army came against Jerusalem and encamped against it; and they built a siege wall against it all around. So the city was besieged until the eleventh year of King Zedekiah. By the ninth day of the fourth month the famine had become so severe in the city that there was no food for the people of the land ... And in the fifth month, on the seventh day of the month (which was the nineteenth year of King Nebuchadnezzar king of Babylon), Nebuzaradan the captain of the guard, a servant of the king of Babylon, came to Jerusalem. He burned the house of the Lord and the king's house; all the houses of Jerusalem, that is, all the houses of the great, he burned with fire. And all the army of the Chaldeans who were with the captain of the guard broke down the walls of Jerusalem all around. 2 Kings 25:1-3, 8-10

The Romans destroyed the Second Temple and the city of Jerusalem in 70 AD. Jesus told His disciples it was going to happen about 30 AD.

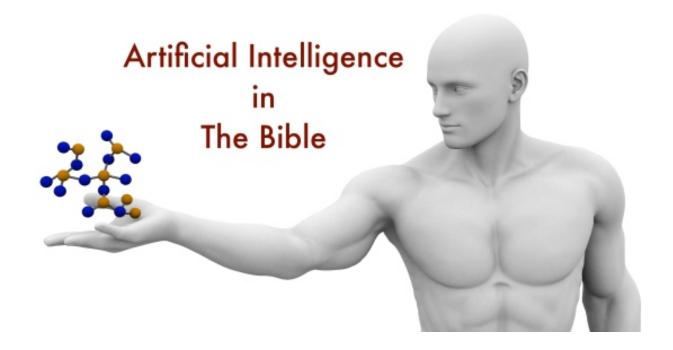
Then as He went out of the temple, one of His disciples said to Him, 'Teacher, see what manner of stones and what buildings are here!' And Jesus answered and said to him, 'Do you see these great buildings? Not one stone shall be left upon another, that shall not be thrown down. Mark 13:1-2

Jewish historian Josephus was an eyewitness to the Roman army siege of Jerusalem and the destruction of the Temple and city. He described the Roman siege machines used against the Jews in Israel. The *ballista* hurled heavy stones long distances to a target. The *catapult* was used to shoot a variety of missiles (e.g. arrows, pikes) at the enemy. The Romans also used large *battering rams*. Josephus, who was a Jewish commander, described the power of that machine.

Now that the embankment was approaching the ramparts, Vespasian had the battering ram advanced into position. The ram is composed of a large beam, like the mast of a ship, on one end of which is a mass of iron of a ram's head, whence its name. It is suspended by ropes and hung from a beam above, which is supported at both ends by upright posts. A large group of men first pull the ram backward, then heave it forward so that it batters the wall. No wall or town can withstand its repeated assaults. Josephus, The Jewish War, W III.193

The Roman General Titus marched from Caesarea with a large number of soldiers toward Jerusalem. That began the siege of Jerusalem that would lead to the fulfillment of Jesus' prophecy concerning the city. Though it took about five months, the Romans were eventually victorious. They destroyed the city and the Temple and killed thousands of Jews. Many more thousands died of starvation in the city because of the Roman blockade. You can read *The Jewish Wars* by Josephus for details of the battles and aftermath.

## Question



Think about all of the building materials and war machines we've described that were used from the earliest time to the destruction of Jerusalem in 70 AD. Do you see any that could be called "Artificial Intelligence?" Did any of the materials or machines have the ability to learn and imitate human behavior? The short answer is "no." As effective as the Roman war machines were in defeating enemies, not one of those machines could learn anything on their own and they certainly couldn't imitate human behavior.

Doesn't that prove that AI is not in the Bible? It does not. Let's take another look inside God's Word.

# Prophecy and Al

We know about AI because we live in the 21st century AD. Anyone who lived before the advent of computers (learning machines) wouldn't have understood the meaning of the word. Alan Turing used the phrase "Computing Machinery and Intelligence" in 1950 and John McCarthy coined the term "Artificial Intelligence" in 1956. So, how could the writers of the Bible (1450BC – 97 AD) know anything about AI? They didn't, but God did.

God is Eternal. He existed before time began, before He created the world. God brought time, space, energy and matter into existence. That's the meaning of "In the beginning God created the heavens and the earth." Time had a beginning. Space had a beginning. Energy had a beginning. Matter had a beginning. God "began" it.

Because God existed before time and knows all things, including what would happen in the future, He knew Artificial Intelligence would exist in the 20th and 21st centuries AD. God also knew people would use AI in the future and the part AI would play in God's eternal plan.

God, who at various times and in various ways spoke in time past to the fathers by the prophets, has in these last days spoken to us by *His* Son, whom He has appointed heir of all things, through whom also He made the worlds. Hebrews 1:1-2

God spoke through Old Testament prophets in a variety of ways so people would know the truth and what the future would look like. God spoke through Jesus Christ and His apostles in the New Testament so people would know the truth and what the future would look like. It is in the prophetic words of the prophets, Jesus Christ and His apostles that we find AI.

#### Visions of the Future

But you, Daniel, shut up the words, and seal the book until the time of the end; many shall run to and fro, and knowledge shall increase. Daniel 12:4

And he said to me, 'Do not seal the words of the prophecy of this book, for the time is at hand. Revelation 22:10

Daniel saw a vision of the future during the 6th century BC and was told to seal up the book "until the time of the end." John the Apostle saw a vision of the future at the end of the 1st century AD and was told NOT to seal the words of the prophecy of the the book "for the time is at hand." That's interesting as we consider when the prophetic visions would unfold in real time.

The visions Daniel and John experienced were from supernaturally intelligent beings. Daniel's final vision came from "a certain man clothed in linen, whose waist was girded with gold of Uphaz!" (Daniel 10:5) Daniel wrote that the message of the vision was was true, "but the appointed time was long." (Daniel 10:1) The word "long" in Hebrew is gādowl and means "great, deep, exceeding." What was long was "the appointed time." The Hebrew word is wəsābā and means "struggle, battle, war, conflict." Daniel received a message from a supernatural intelligence about a great war to come in the future. This supernatural being was most likely an angel and may have even been the angel Gabriel who had explained an earlier vision to Daniel (Daniel 8:16; 9:21). Gabriel told Daniel that "the vision refers to the time of the end" (Daniel 9:8:17).

Daniel spent a long time in mourning, fasting and prayer after seeing the many visions. He was deeply concerned about the future of his people. Daniel was an old man and still living in Babylon and serving as one of three governors in the new government following Persia's victory over the Babylonians

(Daniel 6:1-2). He did not return with other Jews to Israel to rebuild Jerusalem and the Temple (the majority of Jews remained in Babylon). As far as we know, Daniel died in Babylon.

The angel who spoke with Daniel told him that God had sent him with answers to his prayers, but that he (the angel) had been delayed because "the prince of the kingdom of Persia" withstood me twenty-one days; and behold, Michael, one of the chief princes, came to help me, for I had been left alone there with the kings of Persia" (Daniel 10:12-13). Based on the language used in this passage, it would appear the angel's delay was caused by other supernatural beings. Michael is described in the Bible as being an "archangel" (Jude 1:9) who is a "prince" who watches over the Jewish people (Daniel 12:1). The angel who spoke to Daniel told him that he "must return to fight with the prince of Persia" and that Michael would "uphold" him (Daniel 10:20-21). What we learn here is that angels are warring with each other even as earthly rulers and armies are at war.

The angel explained the meaning of Daniel's vision and showed him things that would happen in the future (many years from the explanation of the vision) and in what we might think of as the "deep" future (millennia from the explanation of the vision). Some prophecies can have a double purpose in that it impacts both "near" future events and "deep" future events. That may be the case in Daniel 11 where we see the warring kings of the North and South.

# **Warring Kingdoms**

We know from Daniel 10 that Persia and Greece are mentioned. Daniel 10:1 refers to "the third year of Cyrus king of Persia." Daniel 10:20 refers to "the prince of Greece" who will come. Daniel 11:2-3 refers to three more kings would "will arise in Persia" and a "fourth shall be far richer than them all" (Daniel 11:2). That fourth king is thought to be Xerses I, called Ahasuerus in the Book of Esther. The next part of the vision explanation deals with the rise of Alexander the Great and how his massive kingdom was divided among four of his generals after Alexander's death (Daniel 11:3-4). The angel

told Daniel that the kingdom would not go to "his posterity nor according to his dominion with which he ruled." The fulfillment of that prophecy was that Alexander's children were murdered, so he had no heirs to take over his kingdom.

We next meet kings of the "South" and kings of the "North," who would come from the division of Alexander's kingdom. The kings of the South represent the Ptolomies (Egypt) with the Seleucids in the North (Syria). They became enemies and fought against each other. That put the tiny country of Israel in the middle of the two warring kingdoms and explains why the angel went into great detail about them. The other two parts of Alexander's divided kingdom, Pergamon in Asia Minor and Macedon in Northern Greece, didn't have a direct impact on Israel, so the angel does not mention them while explaining Daniel's vision.

The vision and the angel's explanation are amazing in its accuracy. Daniel lived in the 6th century BC, but the kingdoms of Alexander and his generals date from the 4th century BC to the 1st century BC when the Romans brought those kingdoms to their knees. What we read in Daniel can be seen in detailed fulfillment in ancient history.

# **Attacking Israel**

Gabriel revealed the heart of his message to Daniel beginning in 10:28.

While returning to his land with great riches, his heart shall be moved against the holy covenant; so he shall do damage and return to his own land.

The heart of the message is about the future of Israel.

Historians believe that refers to Antiochus of Syria who killed thousands of Jews and took thousands more as prisoners and slaves as he headed home from fighting in Egypt. The Syrian king would attack Jerusalem again and defile the Temple (Daniel 11:29-35). One of the interesting notes for our study is in verse 35:

And some of those of understanding shall fall, to refine them, purify them, and make them white, until the time of the end; because it is still for the appointed time.

The words "until the time of the end; because it is still for the appointed time" may be a signal of moving from the "near" future to "deep" future. The angel's explanation that followed from Daniel 11:36 – 12:3 may very well catapult the vision to the end of time when the Antichrist arises as a great power. It is at the end of that section that the angel told Daniel, "shut up the words, and seal the book until the time of the end; many shall run to and fro, and knowledge shall increase."

#### Time of the End

The disciples of Jesus Christ asked Him "what will be the sign of Your coming, and of the end of the age?" Jesus gave them several things that would happen in the world in the years to come, but called that "the beginning of sorrows." Jesus then told them how followers of Christ would be delivered up to "tribulation" and be hated by the world. He said that many false prophets would rise up and deceive many people. He said that lawlessness would "abound" and the love of many would grow cold. So, when would the end come? When the Gospel is preached in all the world as a witness to all the nations "then the end will come."

And this gospel of the kingdom will be preached in all the world as a witness to all the nations, and then the end will come. Matthew 24:14

Immediately after saying those words, Jesus said this:

Therefore when you see the 'abomination of desolation,' spoken of by Daniel the prophet, standing in the holy place" (whoever reads, let him understand). Matthew 24:15

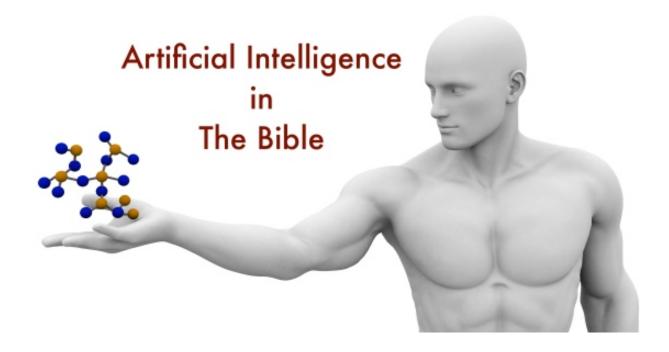
Jesus was referring to Daniel's vision and the angel's explanation:

Then he shall confirm a covenant with many for one week; But in the middle of the week He shall bring an end to sacrifice and offering. And on the wing of abominations shall be one who makes desolate, Even until the consummation, which is determined, Is poured out on the desolate. Daniel 9:27

And forces shall be mustered by him, and they shall defile the sanctuary fortress; then they shall take away the daily sacrifices, and place there the abomination of desolation. Daniel 11:31

This is important because it moves us from the historical Antiochus of Syria to the future Antichrist. Antiochus defiled the Temple in the 2nd century BC. Jesus is answering a question from His disciples in the 1st century AD. The Lord was looking forward to an event in the "deep" future while referring to Daniel's vision and the angel's explanation.

## **Future Al**



Okay, but what does that have to do with Artificial Intelligence?

We live in a time of a literal "explosion" of knowledge and travel (running to and fro). We live in a time when the Gospel is being preached to more and more of the world's population through the work of Christian missions and Bible translation ministries.

Artificial Intelligence has played a vital role in this increase in knowledge, travel and the preaching of the Gospel through a variety of "learning machines" like computers, specialized software, smart phones, apps, and other communication devices.

I attended a meeting with a representative of Wycliffe Translators a few years ago and learned how software has reduced the effort of translation teams while increasing the output of their work. A recent Wycliffe article titled *How AI is accelerating Bible* translation explains how AI is helping Bible translators reach more people faster.

Researchers at Dartmouth College are also using the Bible with AI and ML (Machine Learning) to improve translation work. Algorithms are helping with idiomatic expressions and context as computers translate from one language to another. The term "Artificial Intelligence" was first used at a conference at Dartmouth in 1956.

So many things in Christian ministry that were done by hand and on foot for centuries are now being done by computers and through rapid transportation. That doesn't necessarily mean the quality of ministry has improved, but the speed at which it is done has increased because of machines that learn.

If you've watched church services online during the past couple of years, you may have noticed that AI systems are being used for real-time translation of the services. It's known as NLP (Natural Language Processing). NLP is also used for chatbots, social media monitoring, targeted advertising, analyzing surveys, voice assistants (e.g. Siri, Alexa, Google Assistant), email filtering, grammar checking, autocorrecting (spell checking), etc.

All has changed our world in the last few decades and it will have a huge impact on the future as we approach what Jesus called "the end."

Some of the visions the angel showed Daniel concerned great empires that would come into power within a few centuries. We call those "near" future events. Some of the visions concerned a great empire that would come into power thousands of years later. We call those "deep" future events. It is in those "deep" future prophecies that we find the use of AI.

# **Kingdom Wars**

We left off last time with the angel explaining the future of two warring kingdoms and how their wars would impact Israel. We know from history that those kingdoms were the Ptolemaic Kingdom of Egypt and the Seleucid Empire of Syria. The vision and angel's explanation switched from "near" future events to "deep" future events in Daniel 11.

And some of those of understanding shall fall, to refine them, purify them, and make them white, until the time of the end; because it is still for the appointed time. Then the king shall do according to his own will: he shall exalt and magnify himself above every god, shall speak blasphemies against the God of gods, and shall prosper till the wrath has been accomplished; for what has been determined shall be done. He shall regard neither the God of his fathers nor the desire of women, nor regard any god; for he shall exalt himself above them all. Daniel 11:35-37

The angel used the phrase "the time of the end" a second time just a few sentences later.

At the time of the end the king of the South shall attack him; and the king of the North shall come against him like a whirlwind, with chariots, horsemen, and with many ships; and he shall enter the countries, overwhelm them, and pass through. He shall also enter the Glorious Land, and many countries shall be overthrown; but these shall escape from his hand: Edom, Moab, and the prominent people of Ammon. He shall stretch out his hand against the countries, and the land of Egypt shall not escape. He shall have power over the treasures of gold and silver, and over all the precious things of Egypt; also the Libyans and Ethiopians shall follow at his heels. But news from the east and the north shall trouble him; therefore he shall go out with great fury to destroy and annihilate many. And he shall plant the tents of his palace between the seas and the glorious holy mountain; yet he shall come to his end, and no one will help him. At that time Michael shall stand up, The

great prince who stands watch over the sons of your people; And there shall be a time of trouble, Such as never was since there was a nation, Even to that time. And at that time your people shall be delivered, Every one who is found written in the book. And many of those who sleep in the dust of the earth shall awake, Some to everlasting life, Some to shame and everlasting contempt. Those who are wise shall shine Like the brightness of the firmament, And those who turn many to righteousness Like the stars forever and ever. Daniel 11:40 – 12:3

It is clear from the angel's explanation of Daniel's vision that it is about the "time of the end" we find described and detailed in the New Testament.

#### The Real War

What's going on here? Is this just about earthly kingdoms fighting each other or is something else in play?

And I will put enmity Between you and the woman, And between your seed and her Seed; He shall bruise your head, And you shall bruise His heel. Genesis 3:15

Again, the devil took Him up on an exceedingly high mountain, and showed Him all the kingdoms of the world and their glory. And he said to Him, 'All these things I will give You if You will fall down and worship me.' Then Jesus said to him, 'Away with you, Satan! For it is written, 'You shall worship the Lord your God, and Him only you shall serve.' Matthew 4:8-10

For this purpose the Son of God was manifested, that He might destroy the works of the devil. 1 John 3:8

The real war is between Jesus Christ and Satan. Something terrible happened in the far distant past, possibly before time began. God created Satan the angel to worship and serve Him, but Satan rebelled and became a great enemy to God (see Ezekiel 28:11-19). Satan deceived the first humans and has continued to deceive families and nations to this day. However, God sent His Son into the world to "destroy the works of the devil."

As we look at prophecies about the "deep" future, we are looking at how Jesus Christ will dismantle and destroy everything Satan does. Satan has great power and will use the latest human technology in his play to expand his power, but it is nothing in comparison with the power of the Almighty Son of God.

### Satan and Al

Artificial Intelligence (AI) was a fairly recent advance in technology when I became a Christian more than 50 years ago. Supercomputers were still in their infancy and AI was just getting off the drawing board. How quickly things have changed. Knowledge has grown so rapidly in the last 20 years that we are now living in a world that is very different from what I experienced as a young person. Depending on your age, it's a different world than your parents and grandparents experienced in their lifetime. AI has played a big part in that change.

Satan has always used human technology to his advantage. Satan has deceived families, tribes and nations for thousands of years. People have fought each other with everything from spears, swords, battering rams and chariots to guns, tanks, jets and missiles. Jesus told His followers about Satan and said he is a deceiver, the father of lies, and a thief who has come to steal, kill and destroy. Satan's desire is to dominate humanity that they would worship him. God's desire is to save

humanity that they would worship Him. So, what did God do? He sent His one and only Son into the world to save those who believe in Him and to destroy the works of the devil.

As crazy as our world seems right now, the craziness will come to an end. However, things will get much worse before they get better. That's where Satan and AI come in.

#### The Beast and Al

When they finish their testimony, the beast that ascends out of the bottomless pit will make war against them, overcome them, and kill them. Revelation 11:7

We are introduced to someone or something halfway into the Revelation of Jesus Christ called "the beast" (*thērion* – brute, wild beast, monster). The word is used figuratively for someone with a brutal, bestial nature. The question for us is who or what is the beast.

Jesus, in answering His disciples' question about the end time, told them about false christs, false prophets and "the abomination of desolation" (Matthew 24; Mark 13). The Apostle Paul, in responding to questions about the end time, told Christians in Thessalonica about "the man of sin," "the son of perdition" and "the lawless one" (2 Thessalonians 2). The Apostle John wrote Christians about "the Antichrist." Are these different people or the same person? Is it the same

person the angel described to Daniel as the "king of the North"?

I believe all of the prophecies about the end of time point to all of these being the same person or being. The events outlined in Daniel, Matthew 24, Mark 13, 2 Thessalonians 2 and Revelation 11-19 show a consistency in the events concerning the domination and desperation of one individual who wields brutal power in the world. Question for us is how that individual might use Al for his (or its) purposes.

## Man or Machine?

The angel in Daniel 11 described the king of the North in human terms. Jesus described the false christs and false prophets in human terms. Paul described the "man of sin" in human terms. John described the Antichrist in human terms. But what about the "beast" of Revelation? Human or machine? Let's begin with Paul's description.

Now, brethren, concerning the coming of our Lord Jesus Christ and our gathering together to Him, we ask you, not to be soon shaken in mind or troubled, either by spirit or by word or by letter, as if from us, as though the day of Christ had come. Let no one deceive you by any means; for that Day will not come unless the falling away comes first, and the man of sin is revealed, the son of perdition, who opposes and exalts himself above all that is called God or that is worshiped, so that he sits as God in the temple of God, showing himself that he is God. 2 Thessalonians 2:1 – 4

Paul wrote two letters to the Christians in Thessalonica to address theological issues – some of them being eschatological (time of the end). Though Paul had taught them about the "time of the end" when he was with them (Acts 17), the Christians had became confused. Paul addressed the coming of Jesus Christ for Christians in the first letter and the great apostasy that would precede Christ's coming in the second letter.

The Thessalonians worried that the "day of Christ" had already come. Paul told them that "Day" would not come until there was a great "falling away" (apostasia – defection, revolt, departure, desertion) and the "man of sin" (anthrōpos tēs anomias) is "revealed" (apokaluphthē). Paul also described the "man" of sin as the "son of perdition" (huios tēs apōleias). The order is important here. Paul told the Thessalonians that a great apostasy (falling away) would come first, then the man of sin would be revealed. The man of sin would oppose and exalt himself above all that is called God or that is worshipped. He would sit as God in the Temple of God and show himself that he is God. That's pretty specific. The

Temple of God on earth was located in Jerusalem, but the Romans destroyed it in 70 AD. Paul was looking to a future event that we now know was at least 19-hundred years from the time of Paul's writing.

Paul had more to communicate about the issue with the Thessalonians.

Do you not remember that when I was still with you I told you these things? And now you know what is restraining, that he may be revealed in his own time. For the mystery of lawlessness is already at work; only He who now restrains will do so until He is taken out of the way. And then the lawless one will be revealed, whom the Lord will consume with the breath of His mouth and destroy with the brightness of His coming. The coming of the lawless one is according to the working of Satan, with all power, signs, and lying wonders, and with all unrighteous deception among those who perish, because they did not receive the love of the truth, that they might be saved. And for this reason God will send them strong

delusion, that they should believe the lie, that they all may be condemned who did not believe the truth but had pleasure in unrighteousness. 2 Thessalonians 2:5-12

Paul said that "the mystery of lawlessness is already at work." However, he also said that someone "now restrains" the lawlessness. What's that about?

"Lawlessness" has been in the world for thousands of years, but it will reach its worst point during "the time of the end." Here's how bad Jesus said things will get:

For in those days there will be tribulation, such as has not been since the beginning of the creation which God created until this time, nor ever shall be. And unless the Lord had shortened those days, no flesh would be saved; but for the elect's sake, whom He chose, He shortened the days. Mark 13:19-20

That statement is stunning. "And unless the Lord had shortened those days, no flesh would be saved." What leads up to that time of terrible tribulation? The Apostle John explained it this way:

By this you know the Spirit of God: Every spirit that confesses that Jesus Christ has come in the flesh is of God, and every spirit that does not confess that Jesus Christ has come in the flesh is not of God. And this is the spirit of the Antichrist, which you have heard was coming, and is now already in the world. 1 John 4:2-4

The "spirit of the Antichrist" is that the Son of God did not come in the flesh. That "spirit" was in the world in the 1st century AD and is still in the world in the 21st century.

Jesus Christ, the Son of God, explained it this way. It's the first thing He said in answering His disciples questions about "the end of the age."

And Jesus answered and said to them: 'Take heed that no one deceives you. For many will come in My name, saying, 'I am the Christ,' and will deceive many. Matthew 24:4-5

Jesus also said this to His disciples:

And then many will be offended, will betray one another, and will hate one another. Then many false prophets will rise up anddeceive many. And because lawlessness will abound, the love of many will grow cold. Matthew 24:10-12

Then if anyone says to you, 'Look, here *is* the Christ!' or 'There!' do not believe *it*. For false christs and false prophets will rise and show great signs and wonders to deceive, if possible, even the elect. See, I have told you beforehand. Matthew 24:23-25

Lawlessness is strong in our world today, but God is restraining it until He finishes His purpose for this age. That is another type of mystery:

For I do not desire, brethren, that you should be ignorant of this mystery, lest you should be wise in your own opinion, that blindness in part has happened to Israel until the fullness of the Gentiles has come in. And so all Israel will be saved, as it is written: 'The Deliverer will come out of Zion, And He will turn away ungodliness from Jacob; For this is My covenant with them, When I take away their sins.' Romans 11:25-27

Paul said the restraining would continue until "He is taken out of the way." Once the "Restrainer" is taken out of the way, "then the lawless one will be revealed." Who is the "He" who is restraining and will be taken out of the way in the future?

We know that the Holy Spirit is working in the world today to "convict the world of sin, and of righteousness, and of judgment" (John 16:8). The Spirit also guided the apostles into all truth and told them "things to come" (John 16:13). The Holy Spirit told Paul the time is coming when the Spirit will no longer hold back (restrain) the great evil of the time of the end. He will be "taken out of the way" (*ek mesou genētai* – change or transition out from the middle or among) and then the "lawless one" will be revealed.

The "coming" of the lawless one will be according to the working of Satan with "all power, signs, and lying wonders, and with all unrighteous deception among those who perish, because they did not receive the love of the truth, that they might be saved." It is for that reason that "God will send them strong delusion, that they should believe the lie." The man of sin is going to deceive the world and God will send a strong delusion so the world believes "the lie." What lie?

I believe that Paul's teaching from 1 Thessalonians 4 and 2 Thessalonians 2 describes the same event. Those Christians who are alive when the Spirit of God is "taken out" of the world will be "caught up together" with the resurrected bodies of Christians who have died during the past two-thousand years (also read 1 Corinthians 15). The instaneous disappearance of millions of people in the "twinkling of an eye" along with the Holy Spirit removing His restraining power on the world will lead to a great lie that the "man of sin" will tell the world. What will God do? God will send a great delusion on the people remaining in the world to believe "the lie" of the "man of sin." the Antichrist.

How would that work? How would the entire world believe a lie? Yes, God would send a strong delusion over the world's population to believe 'the lie,' but what lie would the 'lawless one' tell?

# **Empire of the Beast**

Though the "beast" is first mentioned in Revelation 11, we get the most detail about this person from Revelation 13:

Then I stood on the sand of the sea. And I saw a beast rising up out of the sea, having seven heads and ten horns, and on his horns ten crowns, and on his heads a blasphemous name. Now the beast which I saw was like a leopard, his feet were like the feet of a bear, and his mouth like the mouth of a lion. The dragon gave him his power, his throne, and great authority. And I saw one of his heads as if it had been mortally wounded, and his deadly wound was healed. And all the world marveled and followed the beast. So they worshiped the dragon who gave authority to the beast; and they worshiped the beast, saying, 'Who is like the beast? Who is able to make war with him?' And he was given a mouth speaking great things and blasphemies, and he was given authority to continue for forty-two months. Then he opened his mouth in blasphemy against God, to blaspheme His name, His tabernacle, and those who dwell in heaven. It was granted to him to make war with the saints and to overcome them. And authority was given him over every tribe, tongue, and nation. All who dwell on the earth will worship him, whose names have not been written in the Book of Life of the Lamb slain from the foundation of the world. If anyone has an ear, let him hear. He who leads into captivity shall go into captivity; he who kills with the sword must be killed with the sword. Here is the patience and the faith of the saints. Then I saw another beast coming up out of the earth, and he had two horns like a lamb and spoke like a dragon. And he exercises all the authority of the first beast in his presence, and causes the earth and those who dwell in it to worship the first beast, whose deadly wound was healed. He performs great signs, so that he even makes fire come down from heaven on the earth in the sight of men. And he deceives those who dwell on the earth by those signs which he was granted to do in the sight of the beast, telling those who dwell on the earth to make an image to the beast who was wounded by the sword and lived. He was granted power to give breath to the image of the beast, that the image of the beast should both speak and cause as many as would not worship the image of the beast to be killed. He causes all, both small and great, rich and poor, free and slave, to receive a mark on their right hand or on their foreheads, and that no one may buy or sell except one who has the mark or the name of the beast, or the number of his name. Here is wisdom. Let him who has understanding calculate the number of the beast, for it is the number of a man: His number is 666. Revelation 13:1-18

The vision John the Apostle saw of the "beast" must have been staggering to a 1st century man. John was seeing things that were going to happen in the far distant (deep) future. Most Christians living during the history of the Church would have marveled and wondered at what John described. How would these things happen? How would all of this unfold in time and space?

We need to look back at one of the visions Daniel saw for more insight into the beast rising from the sea.

Daniel spoke, saying, 'I saw in my vision by night, and behold, the four winds of heaven were stirring up the Great Sea. And four great beasts came up from the sea, each different from the other. The first was like a lion, and had eagle's wings. I watched till its wings were plucked off; and it was lifted up from the earth and made to stand on two feet like a man, and a man's heart was given to it. Daniel 7:2-4

We know from studying Daniel and history that these four "beasts" were human kings who rose to power from their nations. We learn a little later in the same chapter of Daniel that the beasts "arise out of the earth."

I, Daniel, was grieved in my spirit within my body, and the visions of my head troubled me. I came near to one of those who stood by, and asked him the truth of all this. So he told me and made known to me the interpretation

of these things: 'Those great beasts, which are four, are four kings which arise out of the earth. But the saints of the Most High shall receive the kingdom, and possess the kingdom forever, even forever and ever.' Daniel 7:15-18

So, the supernatural being who gave Daniel the interpretation of the vision said the four beasts are four kings which arise "out of the earth" as well as "out of the sea." The idea is most likely that these four kings were human beings who rose to power and built empires.

The prophet Isaiah used the "sea" term when describing sinful humanity:

But the wicked are like the troubled sea, When it cannot rest, Whose waters cast up mire and dirt. 'There is no peace,' Says my God, 'for the wicked. Isaiah 57:20-21

### Rise of the Beasts

The beast rising out of the "sea" in Revelation 13 is most likely referring to his rising out of the "sea" of sinful humanity. Here's what we learn about this first "beast:"

- he has seven heads and ten horns, and on his horns ten crowns, and on his heads a blasphemous name
- he will be like a leopard, his feet were like the feet of a bear, and his mouth like the mouth of a lion
- the dragon will give the beast his power, his throne, and great authority
- one of his heads as if it had been mortally wounded, and his deadly wound was healed
- all the world marveled and followed the beast
- they worshiped the dragon who gave authority to the beast
- they worshiped the beast, saying, "Who is like the beast?
   Who is able to make war with him?"

- he was given a mouth speaking great things and blasphemies, and he was given authority to continue for forty-two months
- he opened his mouth in blasphemy against God, to blaspheme His name, His tabernacle, and those who dwell in heaven
- It was granted to him to make war with the saints and to overcome them
- authority was given him over every tribe, tongue, and nation
- All who dwell on the earth will worship him, whose names have not been written in the Book of Life of the Lamb slain from the foundation of the world

We also learn about a second "beast" in Revelation 13. John said he saw "another beast coming up out of the earth." This beast had "two horns like a lamb and spoke like a dragon." Here's what that beast will do:

- he exercises all the authority of the first beast in his presence, and causes the earth and those who dwell in it to worship the first beast, whose deadly wound was healed
- performs great signs, so that he even makes fire come down from heaven on the earth in the sight of men
- deceives those who dwell on the earth by those signs
  which he was granted to do in the sight of the beast,
  telling those who dwell on the earth to make an image to
  the beast who was wounded by the sword and lived
- granted power to give breath to the image of the beast, that the image of the beast should both speak and cause as many as would not worship the image of the beast to be killed
- causes all, both small and great, rich and poor, free and slave, to receive a mark on their right hand or on their

foreheads, and that no one may buy or sell except one who has the mark or the name of the beast, or the number of his name

 Let him who has understanding calculate the number of the beast, for it is the number of a man: His number is 666.

We are really seeing three "beasts" in Revelation 13. We have the first "beast" that John referred to as the Antichrist in his first letter. We have the second "beast" that John later referred to as the "false prophet" (Revelation 19:20). Then we have the "dragon" (Satan) who is the authority behind the two "beasts." Thus, the number of the beast – the number of a man – 666 (triple six – trinity of man).

This is the culmination of everything Satan started in the Garden of Eden.

For God knows that in the day you eat of it your eyes will be opened, and you will be like God, knowing good and evil. Genesis 3:5

Satan used what was available to him to deceive the woman and pull the man into joining the rebellion against God (1 Timothy 2:14). Satan has continued to use what was available to him for his deception through the millennia and will do that at the "time of the end."

### Al and the Beast

That brings us to our primary question. How will Satan and the beasts use Artificial Intelligence at the end?

I first began to think about that soon after becoming a Christian more than 50 years ago. I knew that some of what I was reading in Revelation was supernatural. The "dragon" will be the authority behind the "beasts," which is about supernatural power (Satan), but is everything supernatural or might there be another explanation to what I was reading?

As the years have gone by and knowledge increased and technology advanced, I began to think that some of what I was reading in prophecy might be understood from the aspect of modern communications and warfare. The Vietnam war was still underway when I was saved and I was a broadcast journalist. I reported about the various battles every day on radio and watched video of the fighting every night on the news. Helicopters and jets with guns and missiles might explain some of the warfare in Revelation. But I still had

nagging questions about other things I read. Were the things I was reading based on human intelligence (H), supernatural intelligence (S) or artificial intelligence (AI)? What do you think?

- How could one person rule the entire world?
- What lie could they tell that the entire world would believe
   ? (God will also send a great delusion so the world believes the lie)
- How could one person have authority over every tribe, tongue and nation?
- How could a world leader be mortally wounded then have his deadly wound healed?
- Why would the entire world worship that leader?
- Why would the world question "who is able to make war with him"?
- How would the world's population know they were worshipping the "dragon who gave authority to the beast"?

- Why would the world worship a leader who blasphemed God's name, His "tabernacle" and "those who dwell in heaven"?
- How will the beast "make war with the saints" and "overcome them"?
- How will the second beast exercise all of the authority of the first beast "in his presence"?
- How will the second beast cause all who dwell on the earth to worship the first beast "whose deadly wound was healed"?
- How will the second beast make fire come down from heaven on the earth in the sight of men?
- What other signs will the second beast use to deceive "those who dwell on the earth"?
- How will the second beast deceive the people of earth to make "an image to to the beast who was wounded by the sword and lived"?
- What kind of image would people make of the first beast and how will the second beast "give breath to the image of the beast" so that the image "should the image would "speak"?

- How would the image of the first beast "cause as many as would not worship the image of the beast to be killed"?
- How would the image of the first beast cause everyone in the world, small and great, rich and poor, free and slave, to receive "a mark on their right hand or on their foreheads" so that no one could buy or sell unless they had the mark or name of the beast "or the number of his name"?
- Why is the "number of the beast" 666? What will that mean during the second half of the Tribulation?

Looking back at Revelation 11 we can add these questions to our list:

- Why would the Gentiles "tread the holy city underfoot" for the same amount of length of time of the rule of the first beast (42 months = three-and-a-half years)?
- Who are the "two witnesses" and why is the length of the prophesying 1,260 days (three-and-a-half years)?
- How will fire proceed from the mouths of the two witnesses to devour their enemies?
- How will the two witnesses "have power to shut heaven, so that no rain falls in the days of their prophecy; and they have power over waters to turn them to blood, and to strike the earth with all plagues, as often as they desire"?
- How will "the beast that ascends out of the bottomless pit" make war against the witnesses," overcome them, and kill them"?
- How will "peoples, tribes, tongues, and nations" see the dead bodies of the two witnesses lying in the streets of Jerusalem for three-and-half days?

- How will those who dwell on the earth rejoice over them,
   make merry, "and send gifts to one another"?
- How will "the breath of life from God" enter into the bodies of the two witnesses so that they stand on their feet and bring great fear to those who see them?
- How will the witnesses ascend "to heaven in a cloud" and their enemies see them?
- What will cause a great earthquake that will destroy a tenth of the city and kill seven thousand people?
- Why would the rest give "glory to the God of heaven?"

#### Here are some questions from Revelation 12:

- Will people on the earth see the "great sign" that appeared "in heaven"?
- Who is the "woman clothed with the sun, with the moon under her feet, and on her head a garland of twelve stars" who is "with child" and "cried out in labor and in pain to give birth"?
- Who is the "great, fiery red dragon" with seven heads and ten horns and seven diadems on his heads?

- How will the dragon's "tail" draw a third of the stars of heaven and throw them to the earth?
- Who is the "male Child" the dragon wants to "devour"?
- What are the "two wings of a great eagle" the woman flies on to escape to the wilderness "from the presence of the serpent"?
- What wilderness will the woman flee to and how will she survive there for 1,260 days (three-and-a-half years)?
- What is the "water" that the serpent spews from his mouth "like a flood after the woman, that he might cause her to be carried away by the flood"?
- How will the "earth" help the woman by opening "its mouth" and swallowing up the flood "which the dragon had spewed out of his mouth"?
- Why will the dragon turn away from the woman and go "to make war with the rest of her offspring, who keep the commandments of God and have the testimony of Jesus Christ"?

We can also add these questions from later chapters in Revelation:

- Who are the 144-thousand in Revelation 14?
- Will God's wrath really lead to bloodshed outside the city of Jerusalem that will be "up to the horses' bridles, for one thousand six hundred furlongs" (about 184 miles)? (Revelation 14)
- Are the "bowls of the wrath of God on earth" poured out by seven angels supernatural only or might Al be involved? (Revelation 16)
- What will use the "great earthquake" that divides the "great Babylon" into three parts and causes the cities of the nations to fall? (Revelation 16)
- How will "every island" flee away and the mountains not be "found"? (Revelation 16)
- What is the "great hail" that falls on men from heaven?
   (Revelation 16)
- Who is "the great harlot who sits on many waters" in Revelation 17?
- Where is "Babylon the great"? (Revelation 18)

- How does "Babylon the great" fall in a day "in one hour your judgment has come"? (Revelation 18)
- How will the "kings of the earth who committed fornication and lived luxuriously" with Babylon the great "see the smoke of her burning"? (Revelation 18)
- Why will "the beast, the kings of the earth, and their armies" gather together to make war against Jesus Christ and His army? (Revelation 19)
- How will the beast (Antichrist, man of sin) and the false prophet (second beast) be captured and cast alive "into the lake of fire burning with brimstone"? (Revelation 19)
- How will the rest of the attacking army be "killed with the sword which proceeded from the mouth" of Jesus Christ? (Revelation 19)
- How will Satan be bound and cast into the bottomless pit for a thousand years "so that he should deceive the nations no more till the thousand years were finished"? (Revelation 20)
- How will Jesus Christ and His saints reign on the earth for a thousand years? (Revelation 20)

- How will Satan "be released from his prison"? (Revelation 20)
- How will Satan "go out to deceive the nations which are in the four corners of the earth, God and Magog"?
- How will Satan "gather them together to battle, whose number is as the sand of the sea" so that they are able to surround "the camp of the saints and the beloved city"? (Revelation 20)
- Why would such a large number of people who lived during "the thousand years" attack Jesus Christ and His saints in Jerusalem?
- How will fire come "down from God out of heaven" and devour the rebellious people? (Revelation 20)
- How will Satan be "cast into the lake of fire and brimstone where the beast and the false prophet are"? (Revelation 20)

We can ask more questions like these from Revelation, but this should be enough for us to look at the possible use of Artificial Intelligence in the "time of the end."

### Metaverse

We are witnessing the rise of the 'multiverse.' The idea has been around for decades, but it is now impacting enough people and showing enough promise for a new type of Al society that people around the world are seriously taking notice.

Author Neal Stephenson coined the term 'meta verse' in his 1992 novel Snow Crash. Stephenson described "the Metaverse" as an imaginary place generated by a computer. Merriam-Webster Dictionary defined the word this way:

In its current meaning, metaverse generally refers to the concept of a highly immersive virtual world where people gather to socialize, play, and work. Awareness of this term surged on October 29, 2021, when Facebook rebranded itself 'Meta' and released a video in which CEO Mark Zuckerberg says, 'I believe the metaverse is the next chapter for the internet.

The idea of a "Metaverse" has grown far beyond the early days of computer gaming and virtual reality because of its business and economic possibilities.

...some proponents believe that blockchain technology and decentralized apps will be the keys to unlocking the next big leap forward for the Web: the **metaverse**, a place where augmented and virtual reality, next-generation data networks, and decentralized financing and payment systems contribute to a more realistic and immersive digital world where people can socialize, work, and trade digital goods. —Ian Bremmer, *Foreign Affairs*, Nov.-Dec. 2021

This is one of the main explanations people seem to provide for crypto-enthusiasts' sudden turn to cubes: maybe they simply want something physical as a counterweight to crypto. "We deal with this immaterial virtual world—the **metaverse**, as we like to say," Carter said. —Sophie Haigney, *GQ*, 28 Oct. 2021

The fact that Facebook (Meta) and other tech giants are involved in developing and promoting the "Metaverse" may propel its acceptance by billions of 'users' around the world. According to Facebook founder Mark Zuckerburg:

The metaverse is the next evolution of social connection. Our company's vision is to help bring the metaverse to life, so we are changing our name to reflect our commitment to this future. 3D spaces in the metaverse will let you socialize, learn, collaborate and play in ways that go beyond what we can imagine. Meta

Zuckerburg and other futurists see a world where people would spend most of their time living in an imaginary world where they can do things people can only imagine now. Virtual reality, Augmented reality and Smart glasses are some of the current ways people can experience this new method of living inside a computerized world.

However, the problem with this computerized world is that it's not 'real.' It's 'virtual reality,' 'augmented reality,' not 'real reality.' Think about that. If you live inside a world that is not 'real,' then anything could be real. Right?

That brings us to 'the lie' of 2 Thessalonians 2:

Now, brethren, concerning the coming of our Lord Jesus Christ and our gathering together to Him, we ask you, not to be soon shaken in mind or troubled, either by spirit or by word or by letter, as if from us, as though the day of Christ had come. Let no one deceive you by any means; for that Day will not come unless the falling away comes first, and the man of sin is revealed, the son of perdition, who opposes and exalts himself above all that is called God or that is worshiped, so that he sits as God in the temple of God, showing himself that he is God. Do you not remember that when I was still with you I told you these things? And now you know what is restraining, that he may be revealed in his own time. For the mystery of lawlessness is already at work; only He who now

restrains will do so until He is taken out of the way. And then the lawless one will be revealed, whom the Lord will consume with the breath of His mouth and destroy with the brightness of His coming. The coming of the lawless one is according to the working of Satan, with all power, signs, and lying wonders, and with all unrighteous deception among those who perish, because they did not receive the love of the truth, that they might be saved. And for this reason God will send them strong delusion, that they should believe the lie, that they all may be condemned who did not believe the truth but had pleasure in unrighteousness. 2 Thessalonians 2:5-12

If billions of people live inside a lie (imaginary world), how hard would it be for a powerful person (the lawless one) to tell them a lie they would believe? Add to that the Almighty God sending a strong delusion on those people "that they should believe the lie," it's easy to see how billions of people would believe 'the lie.' So, what's the lie?

The key, I think, is that "He who now restrains will do so until He is taken out of the way." Based on years of study and prayer, I believe "He" is the Holy Spirit. The Holy Spirit is the One who restrains evil. Why would the Holy Spirit be "taken out of the way?" The first reason, I think, is to make way for Satan to finish his end-time work on earth. The second reason, I believe, is to remove hundreds of millions of Christians (dead and alive) from the earth to Heaven (see 1 Thessalonians 4; 1 Corinthians 15).

The lie the 'lawless one' will tell, I believe, is how millions of people living on earth disappeared in the 'twinkling of an eye.' If billions of people live in or are influenced by a virtual, augmented 'Metaverse,' an imaginary computerized world, believing the lie of how those people disappeared would seem easier than we might imagine. Add to that God's sending a 'strong delusion' so they would believe the lie and how it *could happen*. What *will happen* is what God says in His Word. The 'lawless one' (Antichrist) will lie and the world will believe him.

## **Christians and Revelation**

Jesus Christ revealed information about "the time of the end" to the Apostle John at the end of the 1st century AD. Jesus had spoken with John decades earlier when John and the other apostles asked the Lord:

Tell us, when will these things be? And what will be the sign of Your coming, and of the end of the age? Matthew 24:3

Jesus gave His closest disciples some information about the end of the age, but not everything. The Holy Spirit revealed more information to the Apostle Paul in the middle of the 1st century (e.g. 1 & 2 Thessalonians, 1 Corinthians), but Jesus personally met with the Apostle John at the end of the 1st century and laid out the end times in great detail. That's what we have in Revelation.

John wrote what he heard Jesus say, what he heard angels say, and what he saw and heard others do and say in Heaven. The letter was delivered to seven churches in Asia Minor and later shared among other churches and eventually added to the Canon of Scripture.

Christians have been talking about the meaning of words and visions shared in Revelation for centuries. Since AI is primarily a 20th century invention, most Christians prior to that time have viewed the descriptions in Revelation as either coming from human intelligence or supernatural intelligence. However, Christians living in the second half of the 20th century and current 21st century could also consider whether some of the descriptions might be artificial intelligence. I believe it does.

# Al in Revelation

We should not be surprised to find AI in Revelation. The vision John saw concerns the battle between God and Satan that has been waged since the beginning of time or even before time began. Revelation shows us the culmination of that war. Satan has always used whatever has been at his disposal. What did he have in the Garden of Eden? A tree. Think about that. Satan used a tree to bring about human rebellion against God. If Satan can use a tree, don't you think he can use Artificial Intelligence? Of course he can.

Here are some of the questions we asked in the last part of our study. We asked if AI could be an answer to some of them. I think the answer is yes – AI as we understand it now and what AI could become in the future is definitely a possibility. Keep in mind that we're viewing AI from the perspective of using it for communications, surveillance, population control and warfare.

- How could one person rule the entire world?
- What lie could they tell that the entire world would believe?
- How could one person have authority over every tribe, tongue and nation?
- How could a world leader be mortally wounded then have his deadly wound healed?
- Why would the entire world worship that leader?
- Why would the world question "who is able to make war with him"?
- How would the world's population know they were worshipping the "dragon who gave authority to the beast"?
- Why would the world worship a leader who blasphemed God's name, His "tabernacle" and "those who dwell in heaven"?
- How will the beast "make war with the saints" and "overcome them"?
- How will the second beast exercise all of the authority of the first beast "in his presence"?

- How will the second beast cause all who dwell on the earth to worship the first beast "whose deadly wound was healed"?
- How will the second beast make fire come down from heaven on the earth in the sight of men?
- What other signs will the second beast use to deceive "those who dwell on the earth"?
- How will the second beast deceive the people of earth to make "an image to to the beast who was wounded by the sword and lived"?
- What kind of image would people make of the first beast and how will the second beast "give breath to the image of the beast" so that the image "should the image would "speak"?
- How would the image of the first beast "cause as many as would not worship the image of the beast to be killed"?
- How would the image of the first beast cause everyone in the world, small and great, rich and poor, free and slave, to receive "a mark on their right hand or on their foreheads" so that no one could buy or sell unless they

had the mark or name of the beast "or the number of his name"?

- Why is the "number of the beast" 666? What will that mean during the second half of the Tribulation?
- How will "the beast that ascends out of the bottomless pit" make war against the witnesses," overcome them, and kill them"?
- How will "peoples, tribes, tongues, and nations" see the dead bodies of the two witnesses lying in the streets of Jerusalem for three-and-half days?
- How will those who dwell on the earth rejoice over them,
   make merry, "and send gifts to one another"?
- Who is "the great harlot who sits on many waters" in Revelation 17?
- Where is "Babylon the great"? (Revelation 18)
- How does "Babylon the great" fall in a day "in one hour your judgment has come"? (Revelation 18)
- How will the "kings of the earth who committed fornication and lived luxuriously" with Babylon the great "see the smoke of her burning"? (Revelation 18)

Let's look at some of the questions and see what we can learn about AI in Revelation.

### **Global Power Vacuum**

How could one or two people develop enough power that the entire world would obey them? I think it begins with a global power vacuum when hundreds of millions of people disappear in an instant, "in the twinkling of an eye" (1 Corinthians 15:52). Some of those people will be alive when Jesus returns for His Church. Others will be Christians who are resurrected from the dead (1 Thessalonians 4 and 1 Corinthians 15). Some of the Christians who are "caught up" to meet Jesus in the air will be leaders of local, regional and national governments. Some will be leaders of corporations. Some will be in the military, law enforcement and judicial branches of government. The "rapture" will cause an enormous "power vacuum" in many countries and regions of the world.

In the Bible

Look through history and you'll find that power vacuums are usually filled by someone or some group. Thanks to the inspiration of the Holy Spirit, we know who that person will be - the beast, also known as the Antichrist. This "man of sin" will be in a position to tell a lie that the world will believe. Why? Because God will send "strong delusion, that they should believe the lie, that they all may be condemned who did not believe the truth but had pleasure in unrighteousness" (2 Thessalonians 2:11-12).



How could the Antichrist tell the world "the lie" with today's technology? Easily. We've already looked at the 'Metaverse.' Let's look at some other aspects of AI that might be used.

We have real-time voice and visual communications with people all over the world. Some live in cities. Some live in small villages. How do we do that? With a personal computer. smart phone and phone apps. Based on the software or apps we use, we can speak live with dozens or even hundreds of people at the same time. We can communicate through mass texts, tweets, and "break-in" live broadcasts to people all over the world. One person who has access to the right communication tools or access to a team of people who have the right communication tools (including mass satellite coordination) could reach a vast majority of the world's population live and then repeat specific propaganda messages every hour of every day until everyone on the planet had heard "the lie." They could communicate to the world through television, social media, computers, smart phones, even virtual assistants. When we bring in government supercomputers that can run or override most information and communication in the world, we begin to understand how one man or one team could promote a "lie" to the entire world. God's sending a strong delusion that the world would "believe" the lie means the world will believe "the lie" of the

Antichrist. Satan and God's purposes would be vastly different, however. Satan will get worship and power. God will get JUSTICE.

Why do we have personal computers, smart phones, phone apps, software, algorithms, social media, mass texting, "break-in" live broadcast capabilities and supercomputers? Artificial Intelligence – Machine Learning. As we mentioned in earlier parts of this series, there are four types of AI:

- 1. Reactive machines
- 2. Limited memory machines
- 3. Theory of mind
- 4. Self-aware Al

We currently use the first two: reactive and limited memory machines. Scientists are working on the next level for Al innovation, Theory of Mind. That's where Al would be able to discern human thought processes, emotions, beliefs and needs. Researchers are working on ways for Al machines to "understand" human beings. The fourth level, Self-aware Al, is

a type of "self consciousness" where a machine would be "aware" of itself and be able to form a representation of itself. This level is also known as Artificial General intelligence (AGI) where the intelligence would be like human intelligence. Though AI research has not accomplished that level yet, might that be what we see in Revelation 13 concerning the "image of the beast?"

## Image of the Beast

The "beast" we first meet in Revelation 11 receives a "deadly wound" in Revelation 13. The beast's deadly wound is healed and that will cause "all the world" to marvel and follow "the beast" and say "who is able to make war with him?" The second beast will exercise all the authority of the first beast "in his presence" and cause everyone on earth to "worship the first beast, whose deadly wound was healed." The second beast will "give breath to the image of the beast who was wounded by the sword and lived." That probably means the first beast will be killed in a battle, but the second beast will breathe life into an "image" (eikoni – likeness, representation, statute) of the beast and the "healed" beast will perform great signs "so that even makes fire come down from heaven on the earth in the sight of men.

In the Bible

While this could be a supernatural event, I wonder if it might also be Artificial General Intelligence (AGI). Scientists are currently working on the future of humanoid robotics. It may be that AGI will be a reality by the time of the Tribulation period described in Revelation. The second beast will give the "image" of the beast the ability to perform great signs and "speak." What will the the image of the first beast say? He will "blaspheme" God and demand worship.

And he was given a mouth speaking great things and blasphemies, and he was given authority to continue for forty-two months. Then he opened his mouth in blasphemy against God, to blaspheme His name, His tabernacle, and those who dwell in heaven. It was granted to him to make war with the saints and to overcome them. And authority was given him over every tribe, tongue, and nation. All who dwell on the earth will worship him, whose names have not been written in the Book of Life of the Lamb slain from the foundation of the world. Revelation 13:5-8

That's to be expected when we consider the "power" behind the beasts: Satan. "The dragon gave him his power, his throne, and great authority." (Revelation 13:2)

### Mark of the Beast

So far we've seen how Al *could* explain how the "beasts" could establish a global government that could demand obedience and worship. Another possible use of Al is in what many call the "mark of the beast."

In the Bible

He causes all, both small and great, rich and poor, free and slave, to receive a mark on their right hand or on their foreheads, and that no one may buy or sell except one who has the mark or the name of the beast, or the number of his name. Here is wisdom. Let him who has understanding calculate the number of the beast, for it is the number of a man: His number is 666. Revelation 13:16-18

A global government would have enormous power and authority, but how would they be able to "cause" (*poieó* – make, manufacture, construct, cause) billions of people to "receive a mark on their right hand or on their foreheads" that includes the "number" of the beast's name? Simple. People can't earn or spend money without receiving the "mark."

Could that really happen? Absolutely. All we have to do is consider what's happened around the world during the past couple of years. We've already seen what billions of people have done during the recent pandemic to be able to continue earning and spending money. We've also seen how Al played a role in governments communicating to and controlling people (e.g. smart televisions, computers, smart phones, phone apps, facial recognition, electronic passports, electronic surveillance, satellite surveillance and mapping, mass texting, etc).

The technology already exists to "cause" people to do whatever a government tells them to do. If people don't receive the "mark" of the beast, they won't be able to work, earn money or buy anything. Take away those kinds of rights from people and they'll do what they're told. A global government would have the technology to make people get the "mark," keep an eye on whether they obey or not, and the military/police power to enforce the requirement.

## **Headquarters of the Beast**

The global government of the beasts will be headquartered at a place called "Babylon the Great." We read about this city in Revelation chapters 14, 16, 17 and 18. How might Al play a part in that city?

In the Bible

I wrote a series last year called "The Happiest City On Earth." It was about the "smart cities" that governments and billionaires are building around the world. It would make sense that the capitol city of the Antichrist would be a "smart city" with the latest technology for controlling people in and around the city. Many cities in the world may be smart cities by the time of the Tribulation. Those cities could be tied into the capital city of Babylon through supercomputers, satellites, etc. so that the "beasts" could control the world through its Al network of cities around the globe. Here's the reason I mention other cities being involved with the capital city of Babylon:

And another angel followed, saying, 'Babylon is fallen, is fallen, that great city, because she has made all nations

drink of the wine of the wrath of her fornication.

Revelation 14:8

Now the great city was divided into three parts, and the cities of the nations fell. And great Babylon was remembered before God, to give her the cup of the wine of the fierceness of His wrath. Revelation 16:19

The kings of the earth who committed fornication and lived luxuriously with her will weep and lament for her, when they see the smoke of her burning, standing at a distance for fear of her torment, saying, 'Alas, alas, that great city Babylon, that mighty city! For in one hour your judgment has come.' Revelation 18:9-10

We see in these references to Babylon the Great that there are many cities, nations and kings on the earth during the rule of the Antichrist (the beast). The leaders of the nations will participate in all the evil and wickedness of the Antichrist and will be devastated when God destroys Babylon in just one day (Revelation 18:15-19). While the world mourns for Babylon, Heaven rejoices:

After these things I heard a loud voice of a great multitude in heaven, saying, 'Alleluia! Salvation and glory and honor and power belong to the Lord our God! For true and righteous are His judgments, because He has judged the great harlot who corrupted the earth with her fornication; and He has avenged on her the blood of His servants shed by her.' Again they said, 'Alleluia! Her smoke rises up forever and ever!' And the twenty-four elders and the four living creatures fell down and worshiped God who sat on the throne. saying, 'Amen! Alleluia!' Then a voice came from the throne, saving, 'Praise our God, all you His servants and those who fear Him, both small and great! Revelation 19:1-5

### Witnesses and the Beast

How will "peoples, tribes, tongues, and nations" see the dead bodies of the two witnesses lying in the streets of Jerusalem for three-and-half days? How will those who dwell on the earth rejoice over them, make merry, "and send gifts to one another"?

Social media is certainly one answer to this question. People with computer and phone apps can connect people visually in real time around the world through a variety of social platforms. Video conferencing is another option. We've learned a lot about how to connect to work and school during the pandemic. Families have been able to see each other through software applications even when they can't see each other in person.

As for people sending "gifts" to others, it's easy to use a credit card or other payment method to buy gifts for friends and family online. They can also send cash that others can pick up at a variety of locations. People who have cryptocurrency accounts can easily send gifts to other people with crypto account through transfers and tipping to their digital "wallets". Given the current state of communications and financial options, it's easy to see how AI might be used to see the dead bodies of the two witnesses and send gifts to others.

### War and the Beast



We see in Revelation that the beast will "make war" against his enemies. Al will most likely play an important role in those wars because of the nature of modern war technology. We can look at the development of war machines in use today and we'll find that researchers and designers used Al in some way.

What about the future of warfare? That is of such interest to governments that many have set up Al centers for their national defense. Here's one example:

The Joint Artificial Intelligence Center (JAIC) is the Department of Defense's (DoD) Artificial Intelligence (AI) Center of Excellence that provides a critical mass of expertise to help the Department harness the gamechanging power of AI. To help operationally prepare the Department for AI, the JAIC integrates technology development, with the requisite policies, knowledge, processes and relationships to ensure long term success and scalability.

The mission of the JAIC is to transform the DoD by accelerating the delivery and adoption of AI to achieve mission impact at scale. The goal is to use AI to solve large and complex problem sets that span multiple services; then, ensure the Services and Components have real-time access to ever-improving libraries of data sets and tools.

As the JAIC's Director, Joint Artificial Intelligence Center, Lieutenant General Michael S. Groen leads the JAIC's progress in support of transforming of U.S. Joint warfighting and departmental processes through the integration of Artificial Intelligence, and enabling the empowerment and unification of bottom-up AI development by innovators across the Defense Department. In support of this, he ensures the JAIC is able to provide the foundational elements of AI and AI-enabling technical services and infrastructure, acquisition support, expertise, and best practices to the Department's AI ecosystem. Department of Defense

The Department of Defense (DoD) established the JAIC in 2018 and began operations in 2019. Here's what the JAIC believes about the future of warfare:

Algorithmic warfare is inevitable. Wars of the future will employ force across all domains in heavily contested and degraded environments. Those armed with AI-enabled advantages (decision, speed, agility, and strategy) will have a distinct operational advantage. JAIC

The United States is not the only country developing AI for the future of warfare. China has been working on AI in warfare for many years and intends to be the global leader in AI by 2030. The chairman of the National Security Commission on Artificial Intelligence said China is within a year or two of matching the U.S. He said that in 2020. The director of the Pentagon's Defense Innovation Unit said the U.S. is in a "superpower marathon with China" to acquire advanced technology. (China Threatens U.S. Primacy in Artificial Intelligence)

Other nations involved in developing AI for warfare include India, Pakistan, Iran, Japan, UK, France, Germany, Italy, Australia, South Korea, Taiwan, Canada and Africa. Every populated continent on earth is involved in a race to use AI for future warfare.

Technological development has become a rat race. In the competition to lead the emerging technology race and the futuristic warfare battleground, artificial intelligence (AI) is rapidly becoming the center of the global power play. As seen across many nations, the development in autonomous weapons system (AWS) is progressing rapidly, and this increase in the weaponization of artificial intelligence seems to have become a highly destabilizing development. It brings complex security challenges for not only each nation's decision makers but also for the future of humanity. Forbes



The U.S. Department of Defense defines Autonomous Weapons Systems (AWS) as "a weapon system(s) that, once activated, can select and engage targets without further intervention by a human operator." This kind of warfare means a future where AI warriors would fight battles in addition to human soldiers. Concerns about AWS brought the terms "killer robot" and "slaughter bots" into debates about the ethics of this kind of AI warfare.

As we look at the "beast" waging war in Revelation, we may be looking through the eyes of the 1st century Apostle John the type of Artificial Intelligence warfare we will see in the 21st century. China's goal of global dominance by 2030 is only eight years from now.

Interestingly, some experts believe that AI will reach human-level intelligence by the year 2030. Ray Kurzweil is Director of Engineering for Google and a futurist I quoted in my book *A History of Man's Quest for Immortality* (published 15 years ago). He spoke to a conference about the future of AI in 2015. He predicted that the brains of humans will be able to connect directly to the "cloud" through tiny robots made from DNA strands. Kurzweil predicted that would happen in the 2030s. Kurzweil also said this about the 21st century.

Read it carefully in view of how this might impact AI in the Bible.

We won't experience one hundred years of technological advance in the twenty-first century; we will witness on the order of twenty thousand years of progress (again, when measured by today's rate of progress), or about one thousand times greater than what was achieved in the twentieth century. Ray Kurzweil

That is hard to fathom, yet it's happening all around us. We are living through an explosion of artificial intelligence that will have profound effects on the lives of everyone living on earth.

# Supernatural and Al

I hope this series has been helpful to you in your study of how the Artificial Intelligence that plays such a significant role in our lives today may be a part of how the Antichrist will rule the world in the future. We don't know when Jesus will return to earth, but we can see how the events in the Revelation of Jesus Christ could easily be a combination of Supernatural and Artificial intelligences.

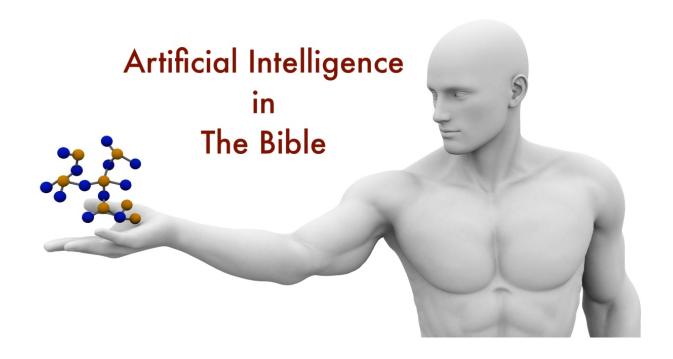
We have not looked at every possible use of Artificial Intelligence in Revelation, but we hope you will think about each one and consider how AI might be involved in the future global government of the Antichrist.

Satan will use whatever he has available to him in his ongoing battle with God. He started by using a tree and a lie. Satan is a supernatural intelligence and can also use human and artificial intelligence to bring about his greatest desire: worldwide worship and obedience. The dragon will have that

for a short time, but then his end and the end of the "beasts" will come swiftly as God pours out His great "wrath" on them.

And I saw the beast, the kings of the earth, and their armies, gathered together to make war against Him who sat on the horse and against His army. Then the beast was captured, and with him the false prophet who worked signs in his presence, by which he deceived those who received the mark of the beast and those who worshiped his image. These two were cast alive into the lake of fire burning with brimstone. And the rest were killed with the sword which proceeded from the mouth of Him who sat on the horse. And all the birds were filled with their flesh. Revelation 19:19-21

The devil, who deceived them, was cast into the lake of fire and brimstone where the beast and the false prophet are. And they will be tormented day and night forever and ever. Revelation 20:10



Scripture taken from the New King James Version®. Copyright © 1982 by Thomas Nelson. Used by permission. All rights reserved.

GraceLife © 1990-2022