AI: FROM A BIBLICAL WORLDVIEW JULY 12, 2023

NOTES

INTRODUCTION

Key Statement: Biblical truth transforms and guides how we use AI to fulfill the Biblical commands to love God and our neighbor. God's Word serves as a guide for all believers (Psalm 119:105) who may be wary of technology's impact on our society and for those who are enthusiastic about where AI is taking us.

(See Week 1: The Authority & Sufficiency of the Bible. - 2 Timothy 3:16; Hebrews 4:12; 2 Peter 1:20-21)

The Age of AI: Artificial Intelligence and the Future of Humanity by Jason Thacker.

Technology is a tool that helps us live out our God-given callings. This is one of the most important things for us to learn as we engage the topic of technology and artificial intelligence. Because we often see the tremendous power that technology has over our lives, we are tempted to treat technology as more than a tool: as something with a value similar to our own if it is powerful enough to work on its own. Technology will be misused and abused by broken people just like you and me.

Nowhere in Scripture are tools or technology condemned for being evil. Scripture shows that tools and technology can be used for both good and evil. Even if a tool was designed for evil, the tool itself isn't evil. What is sinful isn't the sword but how people choose to use it. It can be used for righteous purposes like standing up for justice against those who are evil, but it can also be used to hurt or kill the innocent. While technology isn't immoral in that sense, it does carry the effects of sin and brokenness. However, technology is not morally neutral because it influences and changes us each time we use it. Technology expands what is possible for humans to do. It can be best thought of as a catalyst or an accelerant for change because it opens new opportunities. Broken, sinful, and evil humans are the ones given the abilities to create these tools and the ones who choose how to use them. Paul reminds us that each of us has fallen short and needs repentance (Romans 3:23). The world itself did not sin. Our tools did not rebel. We did.

The story of Cain and Abel is a great example of this truth about the purpose and use of technology (see Genesis 4). Both Cain and Abel were created by God with specific skills and talents. Both used tools (early forms of technology) to work the ground and care for animals. But Cain sinned and chose to use his God-given strength and abilities to kill a fellow image-bearer. He chose to take the good gifts that God gave him and use them for evil and selfish purposes.¹

EXPLANATION & DEFINITION OF AI

Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems.²

[1] https://www.zondervan.com/what-does-the-bible-say-about-artificial-intelligence/?gclid=EAIaIQobChMI9Nm9ptPx_wIVGdnICh17mAmdEAMYASAAEgKn6PD_BwE [2] https://www.techtarget.com/searchenterpriseai/definition/Al-Artificial-Intelligence#:~:text=Artificial%20intelligence%20is%20the%20simulation,by%20machines%2C%20especially%20computer%20systems

What is Artificial Intelligence?

The term artificial intelligence (AI) was coined in 1956 by the American computer scientist John McCarthy, who defines it as "getting a computer to do things which, when done by people, are said to involve intelligence." There is no standard definition of what constitutes AI, though, because there is a lack of agreement on what constitutes intelligence and how it relates to machines.

According to McCarthy, "Intelligence is the computational part of the ability to achieve goals in the world. Varying kinds and degrees of intelligence occur in people, many animals and some machines." Human intelligence includes such capabilities as logic, reasoning, conceptualization, self-awareness, learning, emotional knowledge, planning, creativity, abstract thinking, and problem solving. A machine is generally considered to use AI if it is able to perform in a way that matches these abilities.

What Are the Types of AI?

Artificial intelligence is a field of science concerned with building computers and machines that can reason, learn, and act in such a way that would normally require human intelligence or that involves data whose scale exceeds what humans can analyze.

Al is a broad field that encompasses many different disciplines, including computer science, data analytics and statistics, hardware and software engineering, linguistics, neuroscience, and even philosophy and psychology.

On an operational level for business use, AI is a set of technologies that are based primarily on machine learning and deep learning, used for data analytics, predictions and forecasting, object categorization, natural language processing, recommendations, intelligent data retrieval, and more.¹

THE BENEFITS OF AI

- Automation AI can automate workflows and processes or work independently and autonomously from a human team.
 For example, AI can help automate aspects of cybersecurity by continuously monitoring and analyzing network traffic.
 Similarly, a smart factory may have dozens of different kinds of AI in use, such as robots using computer vision to navigate the factory floor or to inspect products for defects, create digital twins, or use real-time analytics to measure efficiency and output.
- Reduce Human Error AI can eliminate manual errors in data processing, analytics, assembly in manufacturing, and
 other tasks through automation and algorithms that follow the same processes every single time.
- Eliminate Repetitive Tasks AI can be used to perform repetitive tasks, freeing human capital to work on higher impact problems. AI can be used to automate processes, like verifying documents, transcribing phone calls, or answering simple customer questions like "what time do you close?" Robots are often used to perform "dull, dirty, or dangerous" tasks in the place of a human.
- Fast and Accurate AI can process more information more quickly than a human, finding patterns and discovering relationships in data that a human may miss.
- Infinite Availability AI is not limited by time of day, the need for breaks, or other human encumbrances. When running in the cloud, AI and machine learning can be "always on," continuously working on its assigned tasks.
- Accelerated Research and Development The ability to analyze vast amounts of data quickly can lead to accelerated breakthroughs in research and development. For instance, AI has been used in predictive modeling of potential new pharmaceutical treatments, or to quantify the human genome.²

^[1] https://cloud.google.com/learn/what-is-artificial-intelligence

^[2] https://cloud.google.com/learn/what-is-artificial-intelligence

Many current uses of AI appear to be rather mundane, such as, asking iPhone's Siri or Amazon's Alexa to tell you the latest sports score. These machines use voice recognition AI to translate your spoken words into a searchable format. For most people this will be nothing more than a time-saving novelty. But for those with disabilities, such AI enhanced features could provide a greater degree of independence and autonomy. In the near future AI may also transform fields such as health care. For instance, AI may soon allow for MRI scanning that is considerably faster and yet still provides an image with the required accuracy. As Rob Verger of Popular Science notes that patients would spend less time in machines and imaging centers, and hospitals could do more tests per day. By driving down the time and cost of MRIs, doctors could order one of those scans instead of a traditional X-ray or CT exam and save the patient from further exposure to radiation.

There are numerous, real-world applications of AI systems today. Below are some of the most common use cases:

- Speech Recognition It is also known as automatic speech recognition (ASR), computer speech recognition, or speech-to-text, and it is a capability which uses natural language processing (NLP) to process human speech into a written format. Many mobile devices incorporate speech recognition into their systems to conduct voice search (e.g. Siri) or provide more accessibility around texting.
- Customer Service Online virtual agents are replacing human agents along the customer journey. They answer frequently asked questions (FAQs) around topics like shipping, or provide personalized advice, cross-selling products, or suggesting sizes for users, changing the way we think about customer engagement across websites and social media platforms. Examples include messaging bots on e-commerce sites with virtual agents, messaging apps such as Slack and Facebook Messenger, and tasks usually done by virtual assistants and voice assistants.
- Computer Vision This AI technology enables computers and systems to derive meaningful information from
 digital images, videos and other visual inputs, and based on those inputs, it can take action. This ability to provide
 recommendations distinguishes it from image recognition tasks. Powered by convolutional neural networks, computer
 vision has applications within photo tagging in social media, radiology imaging in healthcare, and self-driving cars
 within the automotive industry.
- Recommendation Engines Using past consumption behavior data, AI algorithms can help to discover data trends that can be used to develop more effective cross-selling strategies. This is used to make relevant add-on recommendations to customers during the checkout process for online retailers.
- Automated Stock Trading Designed to optimize stock portfolios, Al-driven high-frequency trading platforms make thousands or even millions of trades per day without human intervention.¹

THE CONCERNS OF AI

Dr. Geoffrey Hinton, known as "the Godfather of AI," quit his job at Google so that he could openly criticize the technology that he helped create. According to an article in the New York Times, his immediate concern is that the internet will be flooded with false photos, videos and text, and the average person will "not be able to know what is true anymore.

While AI can be used for good, the potential for abuse and its negative impact can be astounding. In the hands of terrorists, foreign advisories, criminals and political activists, AI can do great harm. Perhaps the greatest damage can be done to the human psyche when people have to train their minds to be hyper critical of everything. Imagine the potential for increased anxiety, paranoia, and moral uncertainty that can come with the acceptance of AI in our society.

What Are Negative Examples of the Use of AI?

As with every other technology, AI can be used in ways that are harmful or lead to unintended consequences. In China, the government is using AI based tools to increase the power of the authoritarian state. "With millions of cameras and billions of lines of code, China is building a high-tech authoritarian future," writes Paul Mozur in The New York Times. "Beijing is embracing technologies like facial recognition and artificial intelligence to identify and track 1.4 billion people. It wants to assemble a vast and unprecedented national surveillance system, with crucial help from its thriving technology industry."

In the United States, Facebook was recently sued by the Department of Housing and Urban Development for using an AI enhanced system to allow advertisers to restrict who is able to see ads on the platform based on characteristics like race, religion, and national origin.

What Are the Moral Concerns About AI?

When machines begin mimicking human intelligence they can potentially be engaging in moral behavior, making them artificial moral agents (AMAs). As philosopher James Moore explains, from a machine ethics perspective, you can look at machines as being:

- **Ethical Impact Agents** machine systems that have an ethical impact, whether intended or not, on humans, animals, or the environment
- Implicit Ethical Agents machines constrained to avoid unethical outcomes
- Explicit Ethical Agents machines that have algorithms to act ethically
- **Full Ethical Agents** machines that are ethical in the same way humans are (i.e. have free will, consciousness, and intentionality)

Since they are likely to have an influence that is not ethically neutral, most AI machines will be some type of ethical-impact agent. Few machines, however, will ever reach the level, if it's even possible, of full ethical agent. The area of concern is in whether they are implicit or explicit AMAs. Often it can be difficult to draw sharp lines of distinction. Consider, for instance, self-driving cars (a type of AMA) which needs to be programmed for how they should respond to scenarios where collisions are highly likely or unavoidable. Should self-driving vehicles be programmed to always minimize the number of deaths? Should they be programmed to prioritize the lives of their passengers?

Al can also affect the moral behavior of humans. For example, Al technology could be used in sex dolls or sex robots. Although sex dolls have been available in the United States since at least the late 1960s, advances in technology have led to the creation of sex robots that can move, express emotions, and even carry on simple conversations. The result is that such Al enhanced sex dolls could reduce male empathy by teaching men to treat women (and sometimes children) as objects and blank canvases on which to enact their sexual fantasies. (See also: The FAQS: Christians and the Moral Threat of Sex Robots.). ¹

We Should Be Concernecd When Technology Becomes an Escape From Reality.

This can be true of television, gaming, and social media. More and more research is emerging with evidence of the negative effects violent video games have on children. The most popular video games are also some of the most violent, and pediatrician Dr. Cindy Gellner speaks about the numerous effects they have on kids. If you notice behavioral problems and other issues with your child, video games with violence and other adult themes may be to blame. ²

We Should Be Concerned When Technology Solves Problems Based Only on Data With No Moral Foundations Rooted in a Biblical Worldview.

A BIBLICAL RESPONSE

Key documents to review in resources:

https://erlc.com/resource-library/statements/artificial-intelligence-an-evangelical-statement-of-principles/https://www.sbc.net/resource-library/resolutions/on-artificial-intelligence-and-emerging-technologies/

A Biblical Worldview

"And do not be conformed to this world, but be transformed by the renewing of your mind, so that you may prove what the will of God is, that which is good and acceptable and perfect." Romans 12:2 (NASB95)

^[1] https://www.thegospelcoalition.org/article/the-fags-what-christians-should-know-about-artificial-intelligence/

^[2] https://healthcare.utah.edu/the-scope/kids-zone/all/2021/08/video-games-your-child-plays-has-effect-their-behavior#:~:text=Too%20much%20video%20game%20can,having%20aggressive%20thoughts%20and%20behaviors.

Each week I continue to use the phrase "a Biblical worldview." Everyone has a worldview. While there are differences of opinion as to the number of worldviews, there are at least six primary views from which people live their lives: Christian, Islam, Secular Humanism, Marxism, New Age, and Postmodernism. A Christian worldview is built upon the framework of ideas and beliefs through which a Christian individual or group interprets and interacts with the world. Our worldview shapes the physical, emotional, intellectual, and spiritual dimensions of our lives. The most important worldview element is how it answers questions about God.

The Biblical worldview says there is a God, One who is personal, powerful, and caring who created the world and everything in it. It states unequivocally that man is created in God's image, living in essence as God's co-regent over creation. Mankind, born and unborn, rich and poor, able and disabled, has intrinsic worth. Almighty God is a sovereign God, ruler over nations, states, empires, and governments. He is to be worshipped and obeyed through the precepts and principles revealed in His infallible Word. He not only exists, but is sovereign over all of history according to His wisdom and purposes and He is intimately involved in every aspect of life (Franklin Graham, "A Biblical Worldview in Today's Culture").

The Five Major Questions All Worldviews Answer:

- Origin Where did I come from?
- Destiny Where am I going?
- Purpose Why am I here?
- Values How should I live?
- Truth What is the truth?

A Biblical View of Humanity

- The Image of God
- The Material
- The Immaterial

Millard Erickson has said, "Man is to be treated as a unity. His spiritual condition be dealt with independently of his physical and psychological condition, and vice versa."

"Now may the God of peace Himself sanctify you entirely; and may your spirit and soul and body be preserved complete, without blame at the coming of our Lord Jesus Christ." 1 Thessalonians 5:23 (NASB95)

The Bible teaches that humanity possesses a physical body, a soul, and a spirit. The Christian response to the AI Challenge is to stand firm on the Word of God and to offer hope to people who are swimming around in a deep dark sea of uncertainty. We need to make sure that we are standing on the firm foundation of Jesus and to point the way to salvation through him. As the psalmist said, "He drew me up from the pit of destruction, out of the miry bog, and set my feet upon a rock, making my steps secure" (Psalm 40:2).

A Biblical Ethic

(A helpful resource is: Christian Ethics: Contemporary Issues & Options, By: Norman L. Geisler)

Christian ethics are guided by God's revelation in Scripture above other systems of thought as it seeks to love God and neighbor in every moral and ethical issue.¹

"But like the Holy One who called you, be holy yourselves also in all your behavior; because it is written, 'YOU SHALL BE HOLY, FOR I AM HOLY.'" 1 Peter 1:15–16 (NASB95)

Christian ethics are the normative science which is based on the revelation of God in the Bible, especially on the will of God as revealed in the life and teachings of Jesus, that considers what Christians and churches motivated and empowered by the Holy Spirit ought to do concerning the Christian life and the moral issues in the world.

- God is by nature ethical.
- Mankind is responsible for doing God's will in relation to morality.
- The Bible speaks objectively and authoritatively concerning moral decisions and actions.
- The Christian life relates to and demands moral decision and ethical action.
- The church is responsible for influencing social order in the direction of conformity to the will of God and for leading individuals in the direction of doing God's will in everyday life.
- This responsibility involves the church and individual Christians in constant tension between the ideal and the actual.
- The Holy Spirit is active in every phase of ethical decision and moral action. He illuminates God's revelation in the Bible. He motivates Christian service. (Syllabus for the Study of Biblical Ethics by Ebbie Smith)

The Basis of Christian Ethics

"Lord, we do not know where you are going. How can we know the way?" Thomas asked (John 14:5). And then Jesus spoke words His followers have memorized for centuries since: "I am the way, and the truth, and the life. No one comes to the Father except through me" (John 14:6). In this, Jesus summed up the basis for the Christian gospel, and, flowing out of that gospel, the basis of Christian ethics.

In this, Jesus spoke consistently with what He spoke elsewhere in numerous other situations. When the religious leaders pondered the kingdom of God, as though the kingdom were an abstraction, Jesus said, "Behold, the kingdom of God is in your midst" (Luke 17:21), speaking, of course, of Himself. When Jesus told a grieving Martha that her brother would live again, she responded that she knew that he would "rise again in the resurrection on the last day" (John 11:24). But Jesus said to her, "I am the resurrection and the life" (John 11:25).

Jesus is not a means to an end. He is the End and the Means, the Alpha and the Omega. The mystery behind everything in reality is that God's purpose is to "unite all things in Him, things in heaven and things on earth" (Ephesians 1:10). To come to Christ is not to adopt a philosophy, but to be united, as a body to a head, with the very life of Christ himself (Colossians 3:1-3).

Ethics then, is a way, and that way is a Person. We like the first disciples follow Jesus. He is the Way. We like the first disciples have our inclinations and expectations reshaped and reformed by Jesus' teachings. He is the Truth. And we like the first disciples find the power to carry out transformed lives because we are enlivened by the Spirit that raised Him from the dead (Romans 8:11; Colossians 2:19). The gospel points us to and then joins us by faith to this Jesus. And this gospel, by the Word of God and the Spirit of God, calls us to offer up our lives as "living sacrifices" (Romans 12:1) as we are conformed to the life of Christ (Romans 8:29).

Christian ethics are the overflow of a way connected to the Way, of truths anchored in the Truth, of a life rooted in the Life. Thus, a Christian ethic is not about the pursuit of already-agreed-upon abstract human virtues with Christian doctrine and practice as the way to best realize them. Christian ethics is instead applied Christology. When we seek out a Christian ethic, we are asking, "What does this universe around me—and the way I make in it—have to do with Christ and him crucified? How do I walk, by his power, where he is leading us?" 1

"Since, then, you have been raised with Christ, set your hearts on things above, where Christ is seated at the right hand of God. Set your minds on things above, not on earthly things. For you died, and your life is now hidden with Christ in God. When Christ, who is your life, appears, then you also will appear with him in glory. Put to death, therefore, whatever belongs to your earthly nature: sexual immorality, impurity, lust, evil desires and greed, which is idolatry. Because of these, the wrath of God is coming." Colossians 3:1-6 (NASB95)

^[1] https://erlc.com/resource-library/articles/what-is-the-basis-for-christian-ethics/

CONCLUSION

I am not opposed to technology, nor technological advancements as there are many blessings and benefits from both. However, I am concerned when:

- Christians do not approach the use and development of technology from a biblical worldview.
- Technology takes over the God given responsibilities to human beings.
- Technology, while being amoral, begins to make "moral" decisions or problem solving from a value system that is contrary to a biblical worldview.

What must we do?

- Live with a Biblical worldview
- Live with a Biblical view of humanity
- Apply Biblical ethics to every area of life