

Kris Knapczynski - Crafted understanding

This transcript was generated automatically. Its accuracy may vary.

Crafted Understanding so it's so nice to see everyone this morning looking forward to our day ahead and how we want to spend it making the best of our time together. Whether we look for some special things in the Scripture, or talk during the break about our experiences, or study or consider the events in the world, we are grateful for the hope that we have in God and for His Son, through His faithfulness has opened a new a living way and for our faith that we seek to clarify and strengthen every day. For our somewhat quick consideration this morning, I thought to share some thoughts on this cryptic topic, Crafted Understanding which I'll clarify in a moment. We have been living in an era of knowledge and technical advancement, and it's an explosive growth and continues to amaze us. There is an observation made by this Buckingham Fuller who is known for this theory of the knowledge doubling curve.

This theory suggests that the time it takes for human knowledge to double is shrinking. In the past, it might have taken centuries for human knowledge to double, but in the modern era, with the rapid advancement of technology and information dissemination, it's believed that knowledge can double in as much as in a much shorter time frame, such as 12 or 24 months, or even faster. Many of us see a connection of this observation to the verse in Daniel 12:4 but you Daniel, shut up the words and sealed the book until the time of the end, many shall run to and fro and knowledge shall increase, and as we see that running to and fro is expressed in so many different ways. One of those ways is our quick connecting with each other, being able at a moment's notice to see the latest news, to almost be there in the moment as the events happen, to connect with each other instantly, whether through voice or through just images.

And how wonderful it is we know that this is supported. These accomplishments are supported by the framework of these available building materials, these building blocks prepared by God in constructing the earth and the universe as the abode for his creation, and in this era of the time of the End, his creation is given the ability to leverage to use these building materials and the energy and the properties of physics that activate them. This above chart that you see, we may have shared it before. You see all the different elements that the smartphone is constructed of, and their properties enable this otherwise miraculous experience of communicating and connecting.

There was a meteorologist, his name was Alexander MacLeod in the 1860s, and he referred to these properties as latent properties of the matter, and I was wondering what that word latent meant. So it turns out it's those properties that are existing but not yet developed, not yet discovered, not yet manifest, concealed for a while, and it seems that it's taken the world of mankind a long time to come to this point, thousands of years to reach this point of knowledge and understanding, and this growth continues.

We believe that it is connected with the statement from Daniel that it's the time of the end, that there is a turning point for this world, that. That it's awaiting and is going to experience this turning point. He writes, this meteorologist, he says, the mind of man discovers and brings to light the latent properties of the matter which, after remaining secret since the world began, are thus called for, for more important or most important services. He, back then was observing that it must be the time for some of these momentous things to take place. What are they?

What are those momentous things? We believe it's the coming kingdom of God, the kingdom for which our Lord Jesus continued to remind us to expect, to wait, to align with, to prepare for, and to then help others enter it and maintain it. But as in the book of Job, this verse in 26:14 says, these

Kris Knapczynski - Crafted understanding

are just fringes or small parts of his ways. What we have seen so far, and the whisper of his voice is faint, but who can comprehend the might and his thunder?

So you probably may be guessing that the topic crafted understanding is simply artificial intelligence, and if you have turned on the news probably yesterday or the day before, you must have heard that term or the term AI, and we just wanted to give ourselves a little time. It's going to be a short segment here for us to go over some summary of these developments with artificial intelligence, or AI, as we'd call it. The fact that it is inspired by so much in the creation that God has prepared, that human beings have discovered the beauty, the harmony, the extreme amount of design that has gone in this beautiful human organism or the way in which the world is created.

And through machines, they try to simulate and copy that we will hopefully have the ability to appreciate for a little while. We'll ask a question. How can this technology, and can it help us in our lives? And maybe it already does. Perhaps we'll go through some examples and we'll have some thoughts and questions.

So what does artificial intelligence mean? When we say the word artificial, it almost sounds somewhat negative, doesn't it? You know, he came across kind of artificial, as though it wasn't real. When something is artificial, it's really, you know, crafted. It's created by someone man made, as this definition here is suggesting.

It's a copy or imitation of something natural or genuine with the intent of replicating certain features or functions. Okay, artificial, we get that. What's intelligence? Well here this definition says it's the ability to, to learn, understand and apply knowledge, and it evolves capacity for logic, reasoning, problem solving, learning from experience, planning, creativity, critical thinking and adapting to new and changing environments.

Intelligence. We hope that each of us has some of it. We want to grow it, develop it, because it is a helpful tool to us, our own intelligence. Would it not be helpful to have something that is also trying to be an assistant and intelligent one? And so men have for many centuries dreamt about such an assistant, such an intelligent machine, something or some device that would somehow help them with their labor.

There was in the 15th century Leonardo da Vinci, who ideated this great night, and then there were many different designs and implementations that hopefully would at least activate this machine, that would move in a semi intelligent way. But it wasn't yet the time for that, and even we fast forward to the 20th century and the word robot first came on the scene. There was this Czech writer, Karel capek, who in 1920 had this device, this word, hence the word robot is a little in the Slavic language family because it's connected to the word work in the Slavic languages.

And then in the 1950s, Alan Turing, a big name in the early computing, introduced this Turing test of whether it could determine whether machines can really think. The name artificial intelligence got actually coined in 1956 at a conference where many thinking minds came together in Dartmouth or Dartmouthius, and then they started ideating on what this artificial intelligence should be, how it should operate and what machines and what logic should be used. Then in 1957 there was this device called Perceptron and it started the whole neural network understanding a way in which the human mind executes and thinks. This neural network is what powers artificial intelligence.

But things did not really go as quickly as would have been expected. This explosion of knowledge did not yet happen at that time. Here, this wonderful chart, timeline of the development of artificial

Kris Knapczynski - Crafted understanding

intelligence from Accenture shows us that these years 1956 and then 1986 has this bigger next development. So 30 years had elapsed without major advancements or developments that would be so significant. Here I've put a couple winter flakes that's not from the original chart, those are called the winters in AI development.

And it makes you think about some situation or some such arrangement or circumstances in which there is no more interest, there is no more support, financial or otherwise. It's a winter. There were periods of such winters that separated those early ideations that were quite clear of what they want to reach to. Some more advancements, the back propagation laying the foundation for modern neural networks was that was theorized and put on in a paper in 1986. But again probably until the 2000 and tens had we not really experienced the effects of artificial intelligence in our daily lives.

We think about some reasons why these events and developments did not progress as quickly as we see them progressing now. Perhaps there is wisdom and there is some timing behind the scenes that is deciding and coordinating these events. Perhaps the time still has to come for these things. But as we follow this momentous chart, you see how the years of 2012 and 2015, 16, 19, they are now close together. This explosion, this doubling of knowledge, this, this growth continues greatly.

Perhaps in 2012 or so we started using these home devices, these home assistants and we could talk to them. We were so amazed that they can respond. But I think by today we are somewhat disappointed by them. They don't really do exactly what we want them to do, and we say, oh boy, I wish you could do a little better.

Well, this time has been coming and it's becoming much more of a reality with the invention of the GPT technology. What's GPT? GPT is generative pre trained transformer, and if you think that just because I'm saying this I'm understanding what it means, that is not the case. However, there is a wonderful amount of technology and work and design and computing power brought together to make this GPT work.

Generative pre trained transformer. Generative. It means that it creates things from scratch. It's like writing an essay, composing a poem or making up a story. It just simply does it.

And it does it in an unpredictable way every time you ask it. Pre trained, meaning that before you can even use it, this GPT has already been fed a massive amount of information, books, websites, article and learned how language works. It's like reading lots of books to get smarter, and transformer is this technical term for the kind of technology it uses. They're good at paying attention to different parts of a sentence to understand the context better.

Imagine having a conversation when someone not only hears your words, but really gets what you mean. So in simple terms, GPT is a highly educated chat buddy tells me one definition that's read a lot, understands what you're saying and can reply in a way that's usually pretty spot on. It can answer questions, write things or even make jokes based on its training, and how is it Designed definitely, very clearly following the architecture of the human brain, AI mimics human brain operation, human learning, sensory processing like vision and motion and movement, and it's taking as an example the way in which we humans process all these things.

What a wonderful testimony to the grand design and creation of the world and the crown of this earth's creation. Human beings, we read in Genesis 1:28, replenish the earth and subdue it, and in Psalm 86, it talks about man, who has been made little lower than the angels. You have put all

Kris Knapczynski - Crafted understanding

things under his feet, and as the book of Hebrews reminds us, we don't yet see all these things fully subject to him because of that time of coming and becoming worthy of this kingdom, which will be given to those who love the Heavenly Father and have brought themselves to a condition that we would call perfection.

That beginning of that is already known to us. So how does it learn, this AI? Well, it follows the same example of the brain that is connected, of many different points and connections called the neurons and their touch points. It processes the information the same way it learns by doing. It does a lot of training and practicing in the lab before this knowledge and this tool is released to the public.

It spots patterns, it even does multiple things at once. I'm quite sure only some of us can do that.

But it is inspired by brain cells, as is the human language, in which the language of the artificial intelligence. Here we have some elements or some stages of this processing of language. It's the breaking down the text called tokenization, tagging parts of speech, identifying key entities, and transforming words into numbers called vectors. It's an amazing situation, and here there is even a way to depict this.

This. We've asked generative image creation to show us how these things really work. Well, it's a funny thing that these chats try to convey how the mechanism really is processing, but they're not there yet. If you look a little closer, you will see that even the words themselves are misspelled, and that really tells us something.

Not that they are limited and they'll never learn, but the fact that they are learning. It almost seems like they are like a child, and that is what seems to be the case. But in this setup here, we see the connections, for example, between words. There is this famous comparison.

How is the queen different from a king? And the equation, or the way in which you achieve that comparison, is that you simply change the gender. If the queen would be a woman, then it's a queen, but if it's a man, then it's a king. So when you add these two connections, then that's how those relationships between words work, and it's all not in just this one simple dimension, but just multiple dimensions of this design.

And I try to ask it to write for me some things such as teachers would want, and look at this. It wrote for me. I said, write for me on the board that I will be quiet in classroom, and here it showed its attempts to write this.

This is the image generation part. We see that there is an attempt. It's almost like with children. You know, when our little kids were little, we were impressed by how they would babble. They would say a word and almost like check for our reaction.

Is this the right word? Or as our nephew and you always have this first nephew who just remembered everything. If you don't have your kids yet. Oh, this nephew, he would come, he would bring us a drawing. He would draw anything that kind of his imagination would lead him to.

And he would show it to us and would ask, what is this? And I think some of the effects that we see here are just like that, where we, through our feedback and both in the training of these machines as well as us, then using them and providing feedback, we provide more of a strengthened and confirmed understanding of what is correct and what isn't, and that is all built and reused later. But

Kris Knapczynski - Crafted understanding

we read here in Psalm 139. This is the complete Jewish Bible.

So we'll have the word Adonai, which you know means the Lord. Adonai, you have probed me and you know me. You are so familiar with all my ways that before I speak even a word, Adonai, you know all about it already. You have hemmed me in both, both behind and in front and laid your hand on me. Such wonderful knowledge is beyond me, far too high for me to reach.

And then the desire that we have examine me, God, and know my heart, test me and know my thoughts, see if there is any hurtful way, and lead me along the eternal way. So what kind of example could we have here? Maybe we could ask here for a demonstration and ask for, say, an idea, for example. This idea is to give us an example of a question that we can ask to have a meaningful conversation during a break in a Bible study Christian fellowship on Sunday. We would ask for it to formulate this in the first person.

So it's already all ready for us to use. So let's see, I will try to change the share and see if we can do that real time, and in fact, I changed that slightly. I thought that I would ask it to give us an idea for this luncheon that we are having. We're going to be in a lunch location to see what suggestions for a conversation topic we could have.

So this is the so called prompt and then we would just see if it can be received and processed. Okay. Certainly here are the questions you can use to initiate meaningful conversation during a Bible study Christian fellowship on Sunday. What verse of the Bible passage? Oops, sorry, it's scrolling too quickly.

Too quickly for me. What Bible verse or passage has had a significant impact in your life recently and why? Can you share a personal experience or testimony or how your faith has helped you navigate a challenging situation in today's world? What aspects of Christian faith and values do you find particularly relevant or important? We are quite amazed at this idea and in a way, advice for us would be if we use a tool like this to not use it to just replace our own thinking and to make us kind of sluggish to sluggish and lazy, but rather to stimulate our thinking to provoke new ideas and expand our mind, it seems that this would be a useful feature.

Now I was amazed that quite recently the translation and language translation was enabled in these tools and in fact even talking language translation. There was a moment not too long ago when my in laws, which means my son in law's parents, were coming over from Moldova and I do not speak Romanian at all, and I was a little worried how we are going to communicate. It's much better than that. I really didn't need to use the ChatGPT because they're so communicative.

But at the same time there was this question and lo and behold, ChatGPT started talking and it spoke in very good Romanian, as I'm told.

When I was testing this with Andrej, he probably noticed that I kind of like almost cried and had to look away. Those are wonderful things and we certainly appreciate that. We probably don't have time to demonstrate this right now, but if we could, you could hear that language and I'm sure you can do this on your own. We go back to our slide and continue with the visual processing. The same thing applies to the way in which these devices can learn about images, whether it's image acquisition, pattern recognition, understanding processes, even ethics.

And bias is a very important discipline in this science, and now also motion, inspired by what is seen in the world of physics and motion. Here we have some robots that actually are now able to

Kris Knapczynski - Crafted understanding

move some boxes and a dog, AI dog that moves does a pretty Good job here.

But we were comparing him to this other beautiful dog and it's devices like humanoids. It's all about making them move to move smoothly and realistically. It's a mix of mechanics and electronics and other smarts. We now think about the criteria for a genius. You know, in 1898 and through 1944 there was a man whose name was William James, if I'm pronouncing it correctly.

He entered Harvard University at the age of 11 and as an adult was said to have an IQ between 250 and 300 and to be conversant in about 25 languages and dialects. We think about the possibilities and capabilities of human brain and we see that our condition right now, after the years of inherited weaknesses and imperfections, our capacity is so limited, but yet we see what is possible and quite surely what can be done and what will be done in the Kingdom. Another one, Terence Tao, a current genius math whiz with an IQ of 250. Someone tried to compare the intelligence of this newest version of GPT, GPT4 and found that its intelligence is also very high. I don't know if they calculated the exact quotient, but in terms of how many languages it's able to converse in, it's 90.

How many books has it read? It's 4 million. How many words do they do they have in memory? It turns out we only have about nine words in our working memory. Well, GPT4 has 24,000 words.

And now the upcoming product from Google called Gemini will be yet more capable. 200 languages, 40 million books, 150,000 words of working memory, and so on. We reflect on the meaning of these things and what it can do. What can it do? What are some benefits, some of the many benefits.

Productivity, efficiency gains and automation, healthcare, diagnostic accuracy, treatment, personalization, education, safety, accessibility, assistance for disabled language, translation, economic growth, new industries, job creation and as we already hear, job impact, research and development, accelerated discovery and innovation, transportation, autonomous vehicles, traffic optimizations and so on. Those are things that are beautiful in themselves. Those are things that the world of mankind is driving to, and we know them as those words of the Lord's Prayer. Thy kingdom come.

Perhaps they will be partly made, enabled now. Perhaps now it will still whet the appetite of the world, of mankind for what the good is. But maybe for the medical science and discoveries, maybe we'll need them less. I still believe that there will be medical specialists in the kingdom, and I do think that our bodies and the bodies that the world of mankind has are wonderful instruments and you need to know how to use them.

But as we know, there has been also some concerns ethical and moral considerations. Will this artificial general intelligence, which is the next step here B Causing some problems with ethics. What if a great system is developed that overpowers and takes away the autonomy and control from people? What about hacking and malfunctions that are assisted by the smart intelligence, the job market and social structure disruption? What about the military?

How about the minds that can devise something that would be hurtful and extremely destructive? Bias and discrimination, dependency and loss of skills. Because if you continue to use this tool and don't practice your own with your own mind, how will that affect you? Those are many concerns. We know that at the heart of these concerns is oftentimes the heart, the person's intention, the person's motivation, and whether or not they have love for their creator and for their neighbor.

Kris Knapczynski - Crafted understanding

Therefore, we don't know how many years yet before systems like this can come to full fruition, whether there will be another winter that will cause a slowdown. But we know we need that heart, and as we know this is what will happen in the time of the New Covenant, when the law of God will be written into each and every heart. Then systems like this will prove to be a blessing because they will be used for the benefit of each other. We could also have an example of scriptural lookup and analysis.

It's amazing that the knowledge of reading all these different books provides so much knowledge within a system like this. For example, we could ask this tool to quote John 3:16 and provide a word by word analysis from the Greek language, including Strong's numbers, to lay it out in a table and note any manuscript variations in this text, and here it is. It generates it very quickly, though this is just a screenshot. Another possibility provide a summarized expectation as to the object and manner of Christ's return.

According to the materials uploaded. Here is the thing that really fascinated me. Can we create a custom GPT that would be more educated in the learnings of the Scripture, in the understanding of the biblical truth that we see? And can it help us break through some of the longer passages? Can it help us organize the information in our minds?

Can it help us re reword it and rewrite it with the same sense? And sure enough, I'm finding that this function works very well still. Responsibility is on us, on our understanding of it, on our making sure that it is correct. But it is helpful and it may help you in your studies. But be careful.

So let's just do A little reality check on these systems. Artificial intelligence is artificial. It's crafted. It turns out these systems do not have consciousness. It's not a sentient being.

AI systems can simulate understanding by processing data and responding in ways that mimic human intelligence. But they don't possess awareness or intent or genuine understanding. It is only a tool that can be used for something good or something bad. Is the world ready for such a tool? The user needs to have the knowledge, responsibility and maturity.

And make no mistake, hallucinations are possible. There are some examples of that that are easy to achieve, where you think that it's telling you what the true content of a certain passage is, but it's actually just fibbing. It's providing a very close representation of it because that's how these systems are structured.

What are the positive expectations from these? My hopeful expectation is that the truth, including the Bible truth, will continue to emerge and convince many who seek it, that new evidences and research will confirm what we've intuitively felt, what our faith has guided us to accept, that perhaps this will be a new and more objective light on some of the things that were hidden in the dark. My hope is too, that God will control these extreme possibilities against mankind's own judgment, just like perhaps he was holding back the progressive development of these technologies earlier. We remember the sentiment from volume one that if the knowledge developed quicker, the trouble would come quicker. Just like it says in the Book of Daniel, time of the end.

And then there will be trouble. When this knowledge is developed and we know that the kingdom is that much closer, what are some warnings for us? Remember that if I speak in the tongues of men and of angels, but have not love, I'm just like a noisy gong and a clanging cymbal. Remember just what we read today in our scripture from Revelation. You say, I'm rich, I become wealthy and have a need of nothing.

Kris Knapczynski - Crafted understanding

Let's be careful, not be proud when we have abilities and understanding of such tools. Use this tool to stimulate your thinking. Just as we stir one another to love and good works, there is this interesting question of can you be addicted to learning? Can it be a very fulfilling thing to ask a question and immediately know this answer? I remember my uncle back in Poland would rise up at the crack of dawn because they would only have this one kerosene lamp.

And when his mom started the regular household duties, he would open up a book and he would read. Now, you don't need to hardly do that. You just have your answer right away. Can this be a positive? Would the teachers love it or would it be a problem?

Remember, the implementers and those who provide and validate these answers are not of spiritual mind. However, in general I find that so far it's been very positive, fair, truthful and quite focused on the ethics. We now also have this assurance for believers. For I am sure that neither death, nor life, nor angels, nor rulers, nor things present, nor things to come, nor powers, nor height, nor depth, nor anything else in creation will be able to separate us from the love of God in Jesus Christ our Lord. This is for us, those who walk with him right now, but also for all his children.

Nothing will be able to separate them. Let's watch and pray as we consider these things.

So coming back to our artificial intelligence, which really is some crafted understanding, though powerful and capable, very expensive to run when it's first designed, it probably will explode, it will continue to grow, will continue to make both these benefits and cause these concerns. May we watch, pray, be careful and always know that the Lord is watching over this world and he is guiding our experiences and may he lead us as we continue and bless us today.