



## Rhythms and Algorithms: The God of Words and the Importance of Imago Dei in the Age of Generative AI

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First, thanks for letting me spend time with you today. It's a huge honor for me. I greatly admire Richard Zhang, Doris Suzuki Esmerio, and Russ Debenport, who's on this webinar and brought us together at the Accord Network Conference last month.

### **CHRISTIANS ARE USUALLY WARY OF TECHNOLOGY**

Throughout my adult life, I have been concerned by a tendency, particularly among evangelical Christians, to withhold judgment or cast a negative light on anything new or technological. Some prefer to stand on the sidelines with sniper rifles, taking shots at emerging trends and technologies. However, with generative AI, we are not just dealing with a cultural construct but a global technological revolution of massive importance.

Unfortunately, some Christians are fearful of AI, often due to end-times prophecy, and this clouds their judgment about what aspects we can engage with now. Instead, Christians should be leading the way and embracing this technological revolution. There are reasonable, articulate, and faithful people, like Richard, Russ, and Doris, who are thinking about this for the larger Christian community, and their efforts make my heart feel good.

**Are we  
capitulating  
to culture?**

**"Be in, not of"**

**No. AI is not a  
cultural construct. It  
is a super-global  
technology.**



## **WILL AI HURT CREATIVES? MIDJOURNEY & STABLE DIFFUSION**

Let's dive in. Like most people, I had concerns when I first learned about AI technology's sudden and historical proliferation this year. Although the idea of AI ending civilization worried me, my main concern was how it might positively or negatively affect people I know, especially those in creative fields.

Last summer, my son introduced me to MidJourney and Stable Diffusion. He had just arrived home while I was renovating a bathroom. He showed me the speech-to-text visualization software that could create any image. All you had to do was tell it what you wanted.

I said, "Wait, what? You can tell it to draw a picture, and it'll draw anything?"

He said, "Yep. You can tell it to draw a picture of a dog riding a bicycle, eating a banana, and do it in the style of Degas. And it'll do it in seconds."

To test it out, I asked him to tell it to draw a half-Chinese guy installing a vent fan in a bathroom while angry, which was what I was doing at that moment. In just 30 seconds, ten photorealistic pictures of me doing exactly what I was doing at that moment appeared on the screen. I thought to myself, "Holy moly. This is unbelievable. I feel bad for visual artists. This is going to crush them." Then, in December 2022, ChatGPT was introduced, and things got interesting quickly.

## **DISTINGUISHING BETWEEN AI & HUMAN IS IMPORTANT & DIFFICULT**

Over time, given the emergence of LLMs and the discovery of ChatGPT, I was reflecting on the development of AI and its impact on the creative industry, particularly in writing and the visual arts. It occurred to me that soon, it may become difficult for humans to differentiate between writing and art created by generative AI and that created by humans. At that time, I didn't comprehend the potential implications of AI for musicians and voice actors. It was too early to tell what the future held. *Where's all of this going?* I wondered.

In early 2023, in a lunch conversation with my friend Brian Conn, I said, 'Hey, Brian, I think we're going to be at a point very soon where it will be nearly impossible to distinguish between anything created by humans and generative AI, whether it's writing, visual arts, film, music, motion graphics, whatever.'

Right on cue, in March, I received an email from Jeremy Cowart, a renowned portrait photographer in Nashville, who shared that he could no longer tell the difference between some actual human portraits and AI-generated portraits of non-existent people. This revelation stunned him since he was a seasoned expert producing thousands of portraits annually. I thought, "If Jeremy Cowart can no longer differentiate between a human photograph and an AI-generated image, then who can?"

## **IT'S PROBABLY AI UNLESS PROVEN OTHERWISE**

Future-casting as I sometimes do, I envisioned a world where human-made and AI-generated creations become so entangled it will be impossible to tell them apart. Not only that, but I imagined that we were rapidly approaching a point where the use of generative AI in all forms of media becomes so widespread that everyone will assume that AI plays a significant role in creating it unless proven otherwise. Unless proven otherwise? This got me wondering: *How could you 'prove otherwise?'*

## **LAWS FALL SHORT**

Under advisement from about 50 friends in various fields, I started to explore the two predominate approaches to differentiate generative AI from human: (1) legislative and (2) technological.

The legislative approach says, "We are going to pass laws and enforce copyrights to restrict human behavior." However, the legislative approach is insufficient for several reasons.

(i) Copyrights are often ignored since they are complex and cumbersome. Most pragmatic people simply ignore them.

(ii) Laws are slow and ineffective. When asked about AI and ethics, a friend in DC mentioned that Biden had a team working on an executive order on AI, but most people in Congress barely knew about new technologies like ChatGPT. Biden recently released his executive order, but it only provides a 30-thousand-foot view of the issue, doesn't effectively suss out the massive gray area between human-created and AI-created, and doesn't inspire much confidence in me that lawmakers will accomplish much legislatively.

(iii) The third problem, which is the biggest one, is that laws do not necessarily influence human behavior. People do not follow laws just for the sake of the law. As the scriptures say, people do what they think is right in their own eyes. People are motivated by their values, and if their values dictate that they should do something, they will do it, regardless of whether it is lawful. I think laws are important, but I don't refrain from killing people because there's a law that says I shouldn't kill people. I don't kill people because I value human life. So, I'm guided in my "no-murder" policy by my values—not because the law forbids it or for fear of incarceration, but because a higher value drives me.

So, we pinned this idea of human values on our hats.

## SOLUTIONS

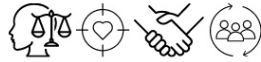
### 1. LEGISLATIVE Laws & copyrights



### 2. TECHNOLOGICAL Encryption & detection



### 3. VALUES-BASED This is us



## SHORTFALLS

### LEGISLATIVE

- Copyrights are complex, cumbersome, and ignored
- Laws are slow and ineffective
- Laws don't dictate human behavior—values do.

### TECHNOLOGICAL

- Encryption only protects existing content
- AI generates and iterates novel content
- AI detection is not solid, easy to beat
- AI chasing its own tail is like the movie "War Games"

### VALUES

- No widely agreed standard
- Diminished societal value
- How to enforce?



## TECHNOLOGY FALLS SHORT

The other approach, the technological approach, favored by startups making millions of dollars, says that we will encrypt digital media on the front end or put some blockchain-style encryption on them, including some digital watermark. Alternatively, we can develop technology on the back end that can detect AI. However, there are a lot of reasons why these approaches fall short.

(i) Encryption only protects newly created content, leaving vast stores of existing human content vulnerable.

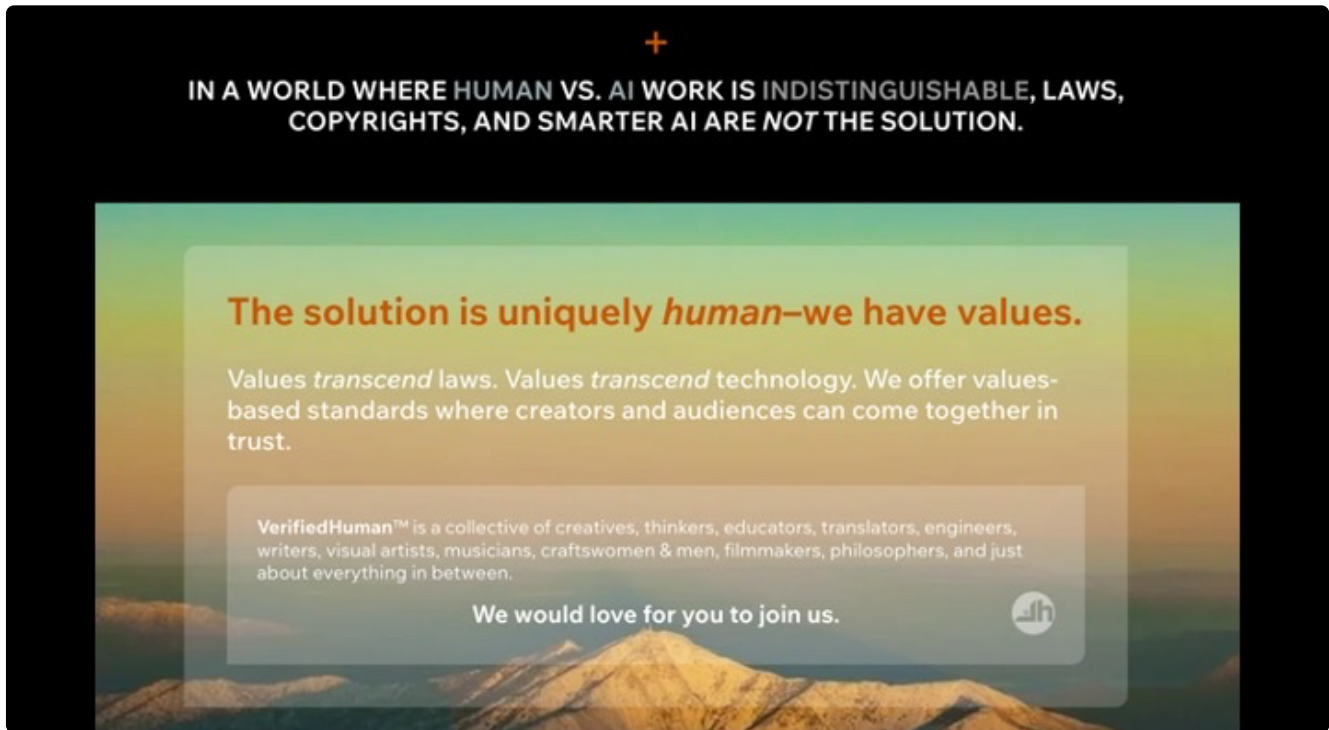
(ii) Generative AI doesn't care whether it's copying something, which means it's not bothered about a watermark. Besides, AI isn't copying any one thing. It's copying the collective everyone, all the things it knows or can discover. And it's iterating an utterly novel product every time it generates content.

(iii) We will use AI technology to rat out other AI technology. The biggest and least talked-about problem is relying on AI to police itself using its own "brain." These massive LLMs are incredibly powerful and will be networked eventually—I have more to say about LLM networking, but I will save it for another time. They do 10 trillion push-ups every night while we sleep. Using technology to police itself is exactly like that movie from the 1980s, 'War Games,' where there was a NORAD supercomputer threatening to launch all the nukes while playing itself in a game of global-thermonuclear war (or chess), which is ultimately unwinnable. The race will continue to reach anti-stasis and stasis ad infinitum. The result will be a state close to equilibrium or presenting minute gains in detection and evasion, one winning over the other in a blink. It is a dog chasing its tail.

Example: Running a piece of Chatbot-generated writing through a detector like [Originality.ai](#) may catch some machine-generated content, but AI detection is surprisingly easy to beat. Also, if we put the same written piece through an algorithm like [Undetectable.ai](#), which "rehumanizes" the content, [Originality.ai](#) can't reliably tell the difference. As an English and Foreign Language teacher by trade, I have assessed (and continue to assess) thousands of student writing samples. It's also challenging for humans to tell the difference. Each piece becomes a Frankenstein of written content, and in its "scrubbed iteration," what happened is unclear.

Just do that dance with visual art content, musical content, video content, etc., and that's our problem.

## WHAT REMAINS? VALUES & TRUST



The fundamental question arises: What happens when legislative and technological solutions are inadequate? The answer: human values and trust come to the forefront. Values and trust are not as sexy as fast machines and executive orders. Still, values and trust are the foundation of human behavior, the global economy, and our ability to navigate the world. Although we have been conditioned to lean towards technological and legislative solutions, trust is a significant and underestimated force in human interactions.

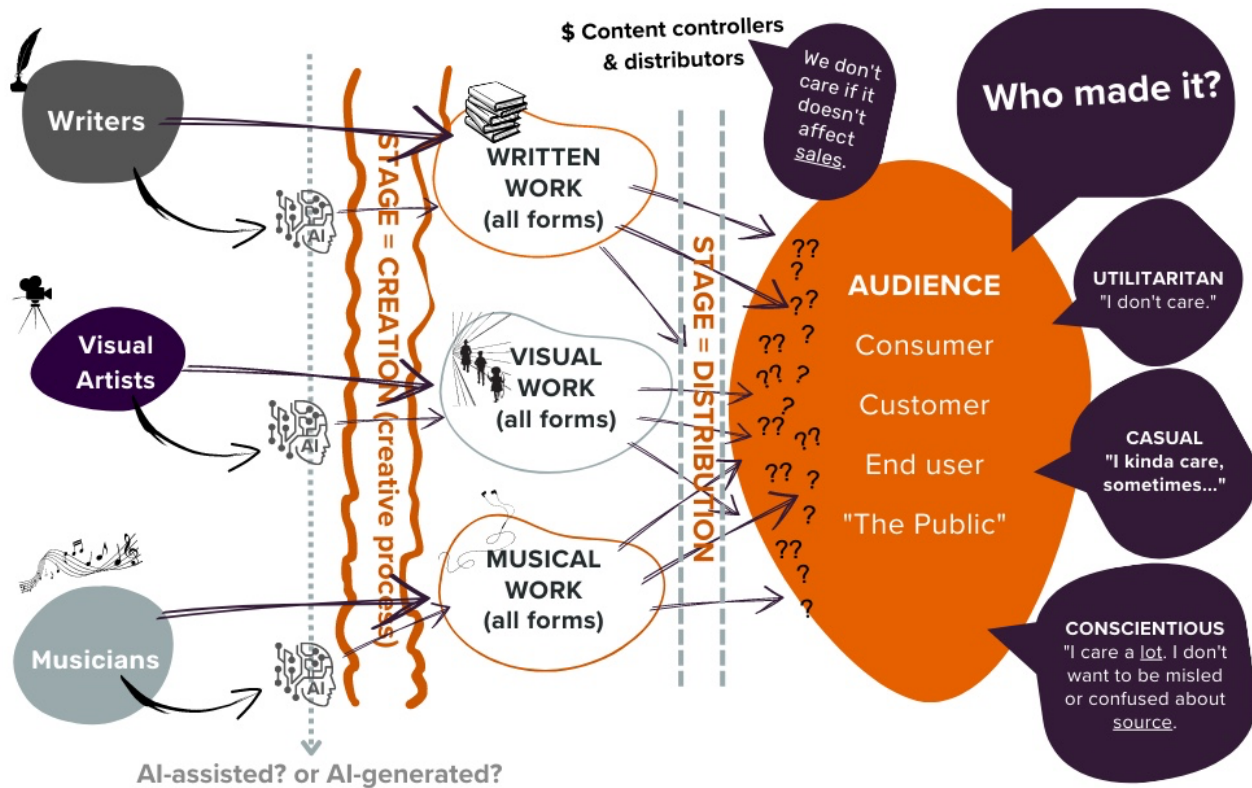
Imagine a world where laws and copyrights don't exist and technology cannot differentiate between human and AI-generated content. We are left with very little except for values. However, values are not insignificant, and the value of trust is immeasurable. It is not perfect, but it is the only thing we have and is more powerful than we give it credit for. We must remember that human relationships and trust make the world go round.

Let's take an example from daily life. Self-checkout lanes are found in most major retail stores in the West. While there's a cost-benefit conversation around them, the fact that they still exist after more than 35 years is a testament to the marketplace's inherent value of trust. Although an attendant might be standing by to manage problems at six checkout stations, it is easy for people to cheat (I'm going to scan this ground beef twice, and I'm not going to scan the steak. I will throw it in my bag and get a great deal on steak.) However, most people are ethical, tell the truth, and operate honestly.

Trust is a fundamental human behavior we often ignore when looking for technological or legislative solutions. We trust people every day without question. When we drive our cars or leave our homes, we trust those around us to be generally good and have our best interests at heart. If we believed that we couldn't trust anyone, neighbors, friends, or even perfect strangers on the side of the road, we would be incapacitated by fear. Our general sense of trust in the goodness of people enables us to navigate the world confidently.

## THE PROBLEM OUTLINED

### The VerifiedHuman™ Problem Model



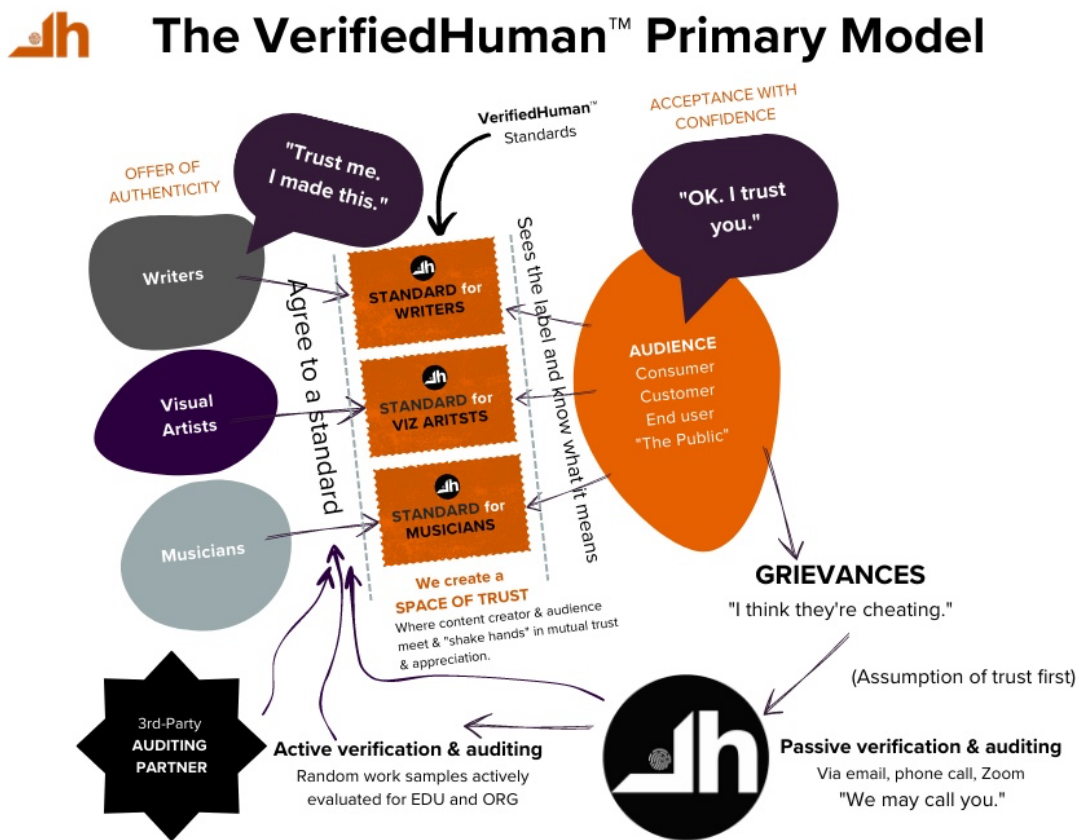
Let me explain the problem we're facing. Content creators, such as writers, visual artists, musicians, and voice actors, produce works of art in various forms. Once created, the content is distributed or shared with the audience through distribution companies or the creator's personal channels. Distributors primarily focus on selling the content and aren't necessarily concerned with the audience's opinion about how the content was created.



Now, the audience receives the content and may or may not be interested in knowing, "Who or what created this piece I'm reading, this song I'm listening to, this image or clip I'm watching?" The consumer's level of interest in knowing who created the content varies, ranging from practical indifference to conscientious concern.

The utilitarian consumer doesn't care who the creator is as long as they like the content and it satisfies their needs. The casual consumer may care a little, while the conscientious consumer cares a lot—they want to know the source of their content to avoid being misled or confused. So, there's a wide range.

## THE VERIFIEDHUMAN™ SOLUTION MODEL



On the left, there are creators such as writers, visual artists, musicians, and voice actors who offer authenticity to their audiences by pledging that they are the ones who created the content. They say, "Hey, I want you to trust me that I am the person who made this for you."

We have set standards for creators to sign, declaring they made the content themselves.

[↔ Click on important\\* words to see definition.](#)

**THE VerifiedHuman™ STANDARD\***  
for WRITERS\*





I represent\* my written work\* to be my (or my team's)\* intellectual property,\* essentially authored\* by (a) human(s),\* and not essentially authored\* by generative AI,\* machine learning,\* or other generative processes.\*



[See full definitions page for this standard](#)

Upon signing, they can use the VerifiedHuman™ label on their content. When audiences see this label, they can confidently accept that a human has essentially created the content.

**LABEL IMAGES FOR YOUR USE**

WORDMARK	LOGO	
These PNGs have transparent backgrounds. We put a gray box behind the white PNG so we can see it against the white background.	Copy image or right click and Save image as...	
<b>VerifiedHuman™</b>		
<b>VerifiedHuman™</b>		
<b>VerifiedHuman™</b>		
<b>VerifiedHuman™</b>		

We understand that some creators may not be honest about the influence of AI on their work. To address this, we are developing active and passive verification models with third parties to ensure the integrity of the VerifiedHuman™ label and address any grievances.

The Passive Verification Model involves asking creators about their creative process, including details about the inspiration, subject, location, equipment used, and any post-processing involved. We may ask questions such as "How did you make this song or take this picture?" and "Did you use any after-effects on your graphics?" to ensure that a human created the content.

The Active Verification model involves a third-party auditing partner collecting random samples and actively assessing them. For example, schools that want to become a VerifiedHuman™ School can verify all of their student writing and content created by teachers.

## WHY STANDARDS?

The problem with values-based systems is that a widely agreed standard must establish a baseline of trust. To address this challenge, we developed the VerifiedHuman™ Standards, a thoughtful, clearly framed, and broadly acceptable set of standards. These standards assure consumers that human creators, not machines, essentially create the content they engage with. Visual artists, musicians, writers, and voice actors adhere to these standards to inform the world that they primarily created the content rather than a machine.

**Introducing the VerifiedHuman™ Standards.**

**"Hey, world. A human made this, not a machine."**  
The VerifiedHuman™ Standards promote responsible, honest, and original creation of artistic and academic work.

**for WRITERS**  
Writers are rising to say,  
"These are my own words."  
[Learn more](#)

**for VISUAL ARTISTS**  
Artists are rising to say,  
"This is my creative work."  
[Learn more](#)

**for MUSICIANS**  
Musicians are rising to say,  
"This song came from me."  
[Learn more](#)

**for VOICE ACTORS**  
Voice Actors are rising to say,  
"This is my voice."  
[Learn more](#)

**for EDUCATION**  
Educators are rising to explore  
AI and learning outcomes.  
[Learn more](#)

**for ORGANIZATIONS**  
Organizations are helping uphold  
the value of human work.  
[Learn more](#)

**ADVOCATE for US**  
Friends worldwide are rising to say,  
"I proudly support VerifiedHuman™."  
[Learn more](#)

Our approach is similar to Fairtrade, who has said, "There must be an ethical way, globally, to get coffee from the farm to the cup." Consumers are willing to pay a little more for their coffee if it's labeled Fairtrade because they know (or hope) the supply chain is being audited and monitored and the farmers growing the beans aren't getting screwed. There is only value if the market understands what this label means and trusts the label, knowing, 'Fairtrade is looking out for the little guy.'

Our standard seeks to provide a similar assurance to the consumers that human creators are behind the content they consume. We have defined the terms in each standard with a comprehensive pro forma of definitions to provide clarity, and Verified Human™ monitors creator compliance. You can find all of our standards and definitions at [www.verifiedhuman.info](http://www.verifiedhuman.info).



*This document provides clarity on terms in the standard and their meanings. It also helps writers understand the motivation behind the standard.*

**What's in this document?**

[C⇒](#)

[Foreword](#)

[Definitions in the Standard](#)

[Other Definitions](#)

[Commonly Accepted Uses of AI in Writing](#)

[Interpretation](#)

[The Five-Word Principle](#)

[Essential Authorship](#)

## FOREWORD

The most important definition in the standard is that of written work. In this context, written work refers to selecting and arranging words in a meaningful order.

Language allows for an infinite number of word combinations in writing. When a human selects and arranges words, they are considered the essential author of that written work. Conversely, when a machine selects and arranges words, the machine is considered the essential author.

We support writers who use AI in non-standard ways and face challenges agreeing to the standard.

*For instance, a poet may intentionally use AI to curate, compose, and recombine phrases to create innovative prose and poetry. They may find the VerifiedHuman™ label unhelpful on this work but use it on another.*

In this way, we hope to be helpful and encouraging to all writers everywhere.

In this foreword, we aim to address two common cases.

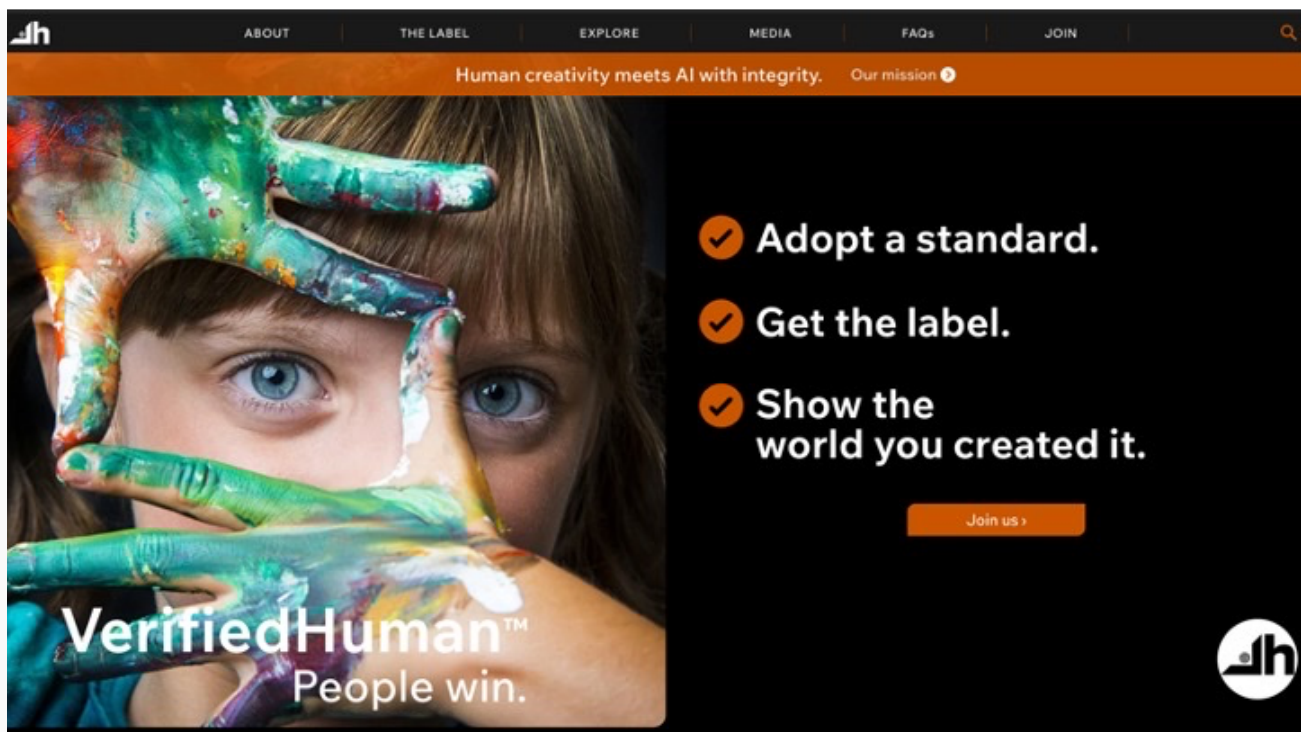
*i. AI Assistance in Drafting or Outlining Written Work:*

## CREATING A SPACE FOR TRUST

Our primary model revolves around creating standards to establish a space of trust between content creators and their audience. This space of trust is crucial because it is where the two parties come together in mutual trust and appreciation. The creator says, "I made this for you," while the audience responds, "Okay, I trust you."

To give you an analogy, people swear on the Bible in a court of law, not because everyone will testify truthfully, but because it provides a point of reference. They have the witness place their hand on the Bible and say, "I swear to tell the truth, the whole truth, and nothing but the truth." Is this an archaic practice? Does it matter that they do that? Absolutely. If someone gives false testimony, the court can return to that moment and say, "Remember when you swore to tell the truth, the whole truth, and nothing but the truth? We marked the moment in time. We agreed about what trust looks like, and when you break trust, we go back and say, 'This is what went wrong.'" Similarly, having a space of trust between content creators and their audience is significant.

We created a website called [verifiedhuman.info](https://verifiedhuman.info) to help content creators build trust with their audience. Creators can adopt our standards, get the label, and then show the world they created it. Our standards are creator-centric and cover visual artists, writers, musicians, and voice actors. Incidentally, we are currently assessing student writing samples from 16 schools in China, EAU, the Philippines, and the US. While using some AI detection tools like [Originality.ai](https://Originality.ai), we aim to see if we can assess human authorship accurately.



## THOUGHTS FROM COMMERCIALY SUCCESSFUL MUSICIANS

I recently asked my friend Andy Hughes to discuss the Verified Human™ concept with some active and successful musicians in Nashville. These musicians included a hard-rock hair band popular in the 80s-90s, a pop duo popular in the 2000s, and a prolific country musician with recent hits. Their response was both interesting and encouraging.

They made three points.

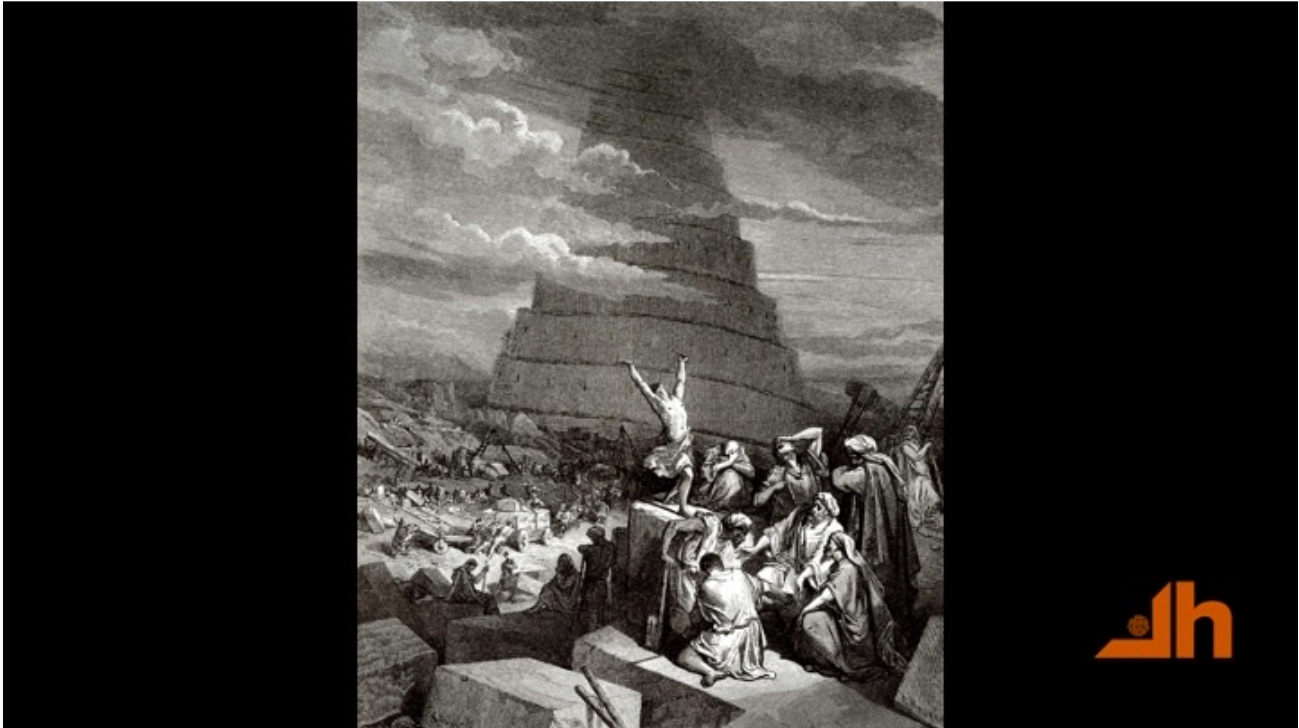
(1) People under 40 don't really care where their music comes from. However, those above 40, falling into the casual to conscientious group, show some concern.

(2) They compared VerifiedHuman™ to someone who arrives six hours early to a party. Initially, there is no action, but people, music, and food arrive after a while. They suggested we hang out for a while and see what happens.

(3) They predicted that human would be the new vinyl. Just as vinyl made a surprising and triumphant resurgence in the era of CDs and lossless digital audio, they believe that human-created music could be a coming trend.

## **WE ARE LIVING IN THE ANTI-BABEL ERA**

Let me shift the focus of the discussion to a historical and theological perspective. Take a look at the picture below. It's a picture of the Tower of Babel, etched by Gustave Dore. You might recognize it. This story comes from the book of Genesis in Jewish, Muslim, and Christian scriptures.



The story goes that all humans spoke the same language and decided it was time to build a massive city using new "brick" technology. "We can bake bricks, cut rocks, make everything square up. That's smart. Odd-shaped rocks that don't stack very well.

They started building tall buildings known as ziggurats, and God became concerned. I don't think the issue was that God was worried about humans storming the gates of heaven with a skyscraper but that they were getting ahead of themselves with their relentless desire to control their own future and be their own gods. After all, God had instructed them to spread out, multiply, and fill the earth, but instead, they were clustering into cities and building big buildings.

God defused their language to stop their plan, making it so large groups could no longer understand each other. This forced them to clump together into groups of people speaking a language they could understand. So, they locked arms with the groups they could communicate with, maybe five to ten thousand people, and then moved off to their own land to do their own thing.

In a TED talk early in 2023, two technology ethicists, Aza Raskin, and Tristan Harris, addressed the fact that AI technology was rapidly developing because individual silos of AI development—robotics, genetics, medicine, linguistics, computer science—were suddenly able to communicate with each other through common LLMs (large language models). As a result, the curve of AI development went vertical when they started speaking the same language. I gasped, "This is like an anti-Babel era in human history where languages were coming back together again." Recently, a company released pods that can be attached to your lapel. They can translate in real-time what you're saying in another language and hear what the speaker is saying translated into your ear in whatever language you speak. So, we're moving into this anti-Babel era.

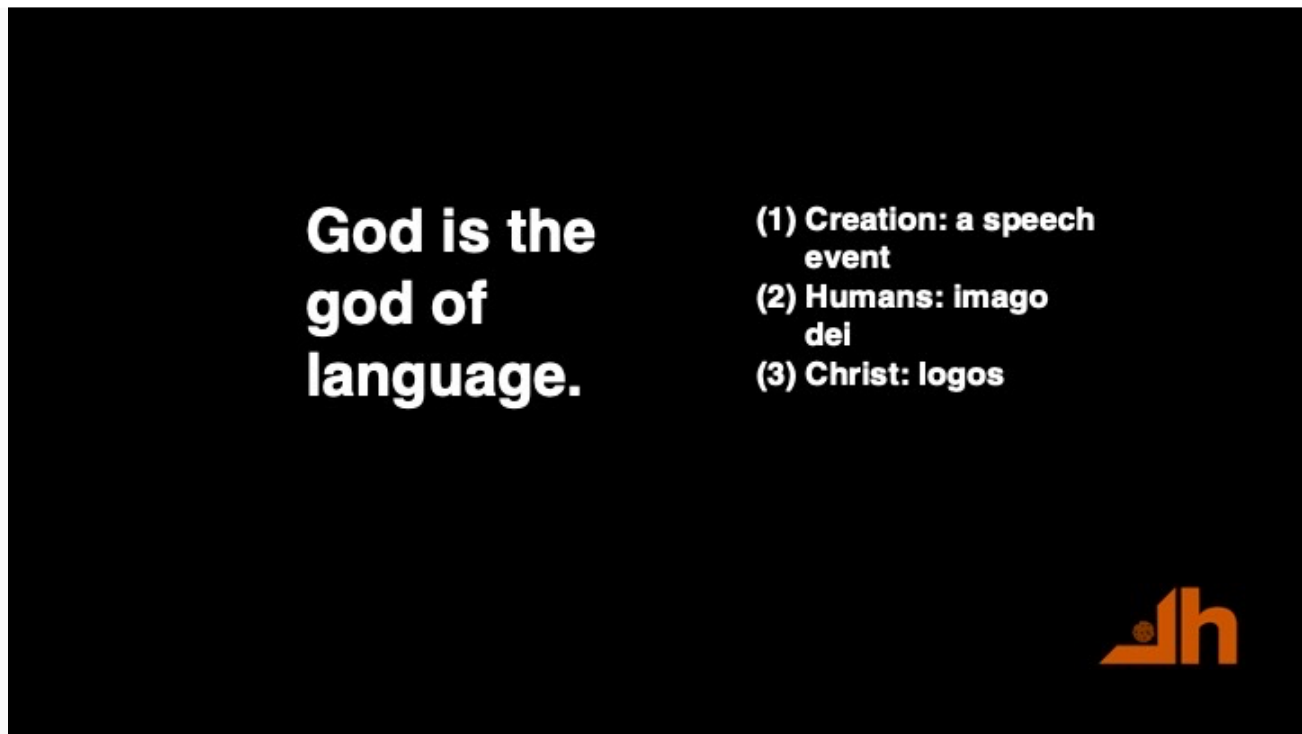
## **GOD IS A GOD OF LANGUAGE**

Here is another picture that Gustave Dore etched about the Pentecost story. It portrays people miraculously hearing and understanding languages they didn't learn.






These, to me, illustrate that God is a God of language. It's fascinating that, according to the scriptures, God created the cosmos with a *speech event*; God said, "Let there be light." God didn't wave a magic wand like Mickey Mouse. God spoke. God's revelation to humans has been an ongoing and unfolding conversation throughout history. Think about the Word of God; the Word of God is *language*. It's black and white lines and circles on paper or parchment. It is the best revelation to humans of the nature of God, the stories of God, and the conversation of God, through the writings of peasants, criminals, outcasts, scholars, soldiers, kings, and missionaries about God's Spirit moving in our world. And it's all in words.



**God is the  
god of  
language.**

- (1) Creation: a speech event**
- (2) Humans: imago dei**
- (3) Christ: logos**



HUMANS ARE CREATED IMAGO DEI

I point these out to say that the development of AI technology must not surprise God. An' human beings, as scriptures say, are created in God's own image, "In God's image God created them..." (Genesis) and "It was of God's own will that God gave us birth as his children by the word of truth so that we will become a kind of first fruits of God's creatures..." (James). God gave us the ability to communicate complex and abstract ideas using language. God deals in language, so we deal in language. Unlike other creatures, we use language to express complex and nuanced life experiences and ideas that go beyond "Me want banana." Unsurprisingly, they couldn't codify "dolphin language" or "bird language," or, after decades of trying, couldn't teach even the most intelligent primates to sign language. Our ability to use language sets us apart from other creatures as part of the Imago Dei in us. It's also important to note that Christ is called the *logos*, the *word* existing before time (John). These all serve to highlight the importance of language in our lives of faith.

**None of  
this is  
surprising  
to God.**



**MICAH'S FINAL THOUGHTS FOR CHRISTIANS**

**We are all in  
it together.**

- **AI is here.**
- **It's going to change everything.**
- **Don't worry.**
- **Lean into the curve.**
- **Learn.**
- **Pray.**
- **Trust God.**



My message to Christians is simple: Don't just sit and criticize. Don't stand on the sidelines and snipe. Get involved.

Artificial Intelligence is here, and it's going to transform everything. It's not just a cultural trend or a matter of debate. It's the new reality, and we must be a part of it. Christians should not worry but instead, lead the way by utilizing AI to fulfill God's purpose. We need to embrace the progress and learn how to use it effectively. It's time to acquire new knowledge, pray, and put our trust in God.

**Micah  
Voraritskul**



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