Welcome to the Ethically Speaking podcast, I am your host Dylan Doyle Burke. Ethically Speaking is a podcast dedicated to asking the fundamental questions of what it means to be ethical in a rapidly evolving world. This episode is part of a series focused on interrogating the ethical questions of artificial intelligence and machine learning. On this episode, we speak with Dr. Ted Vial. Dr. Vial is the senior researcher and founding member of the Iliff AI Institute, the Potthoff Professor of Theology and Modern Western Religious Thought, and the Associate Dean of Curriculum and Institutional Research at the Iliff School of Theology. His current research is in two areas: one, artificial intelligence and theories of human nature; and two, the construction of Judaism and gender in the modern world. In this conversation, Dr. Vial and I discuss how advances in artificial intelligence have changed how our society understands God and mortality and what it means to be human. By the end of this discussion, we hope that listeners will be able to list ways that AI technology has impacted thinking about God and philosophy and to be able to name ways that Dr. Vial has navigated teaching about technology in a seminary context, especially in that radically interdisciplinary space. It is our pleasure to welcome Dr. Ted Vial to Ethically Speaking.

We're here today with Dr. Ted Vial. How are you doing today? Dr. Vial?

I'm doing pretty good. Thanks. How are you doing?

I'm doing well. I'm doing well. It's a wild time in our world right now. But thank you for sitting down with us for this interview. We were wondering if you could just start by saying a little bit more about your own journey. And where do you find yourself right now at the intersection between theology and artificial intelligence?

Sure. So, I teach Theology at the Iliff School of Theology. I am a sort of a historian, intellectual historian of the history of Christian theology and my focus mostly on 19th century German stuff. And my main interest is actually Theological Anthropology, or different ideas about different ways that people have imagined or conceptualize what it means to be human and how that plays out in other aspects of the way they organize their lives. So, in the 19th Century, it turns out is sort of an important moment for how we today think about who we are as humans. So, I basically been doing that for 15 years at Iliff, and that means I'm interested in things like the intersection of theology and race, theology and gender, theology and nationalism, things like that. And about, I don't know, four or five years ago... So Iliff has
had this experiment of humanity's lab of people who are good at digital humanities tools, trying to get those of us who are not good at them interested in using them.

Dr. Ted Vial  3:30

And I didn't really pay much attention, but I did have this fascinating conversation with Justin Barber several years ago, who I know you've already talked to, in which I was trying to get a handle on why people were interested in digital humanities. And he told me about his dissertation, and I don't know how much he told you about his dissertation, but it was on Eusebius... When Jack Fitzmeyer was the Executive Director of the AAR, he asked me to head up this taskforce on "The Future of Publishing." And one part of the task force was on the "Future of Digital Humanities" and how departments should evaluate the scholarship in digital humanities because it doesn't result necessarily in books - departments are very good at counting books for hiring and tenure decisions - and so I knew that Justin had been working in this, so I just was trying to get a handle on what Justin had done. So, his dissertation was basically footnoting Eusebius, because like all ancient figures, Eusebius quotes, sometimes he paraphrases a lot, sometimes he alludes to things, and there's a sort of a raging debate in the secondary literature about what he gets and where he gets it. And Justin was able to feed Eusebius' Greek manuscripts into an algorithm that he had written, and compare it to a huge corpus of ancient Greek texts and actually do the work of footnoting Eusebius, which would be the lifetime work of a scholar at least, in a couple of years. And that was really very powerful...

Dr. Ted Vial  5:04

So, like I mentioned [about] the power of doing this. In my own work, I have tens of thousands of letters to read from these 19th century Jewish women, who I'm currently working on. And if I could do that, in a couple of years instead of in a lifetime, that would be a great help to me. But the other thing was interesting me was that Justin's dissertation committee was completely ill-equipped to evaluate his dissertation. Like they saw the value of his results, but they were all Early Christianity scholars and nobody had the competence in Computer Science to know whether he had actually done what he said he had done. And Justin himself sort of said, like, "hey, the way this works is there's all this open access code. Like I didn't start from scratch: I pulled this code, I modified it, I built a model, and then I put it back out into the open access community." And so even at the level of Theological Anthropology, the question of "what is an author, and what is original research?" How should we count Justin's contribution? In Justin's mind, his original contribution had more to do with the code that he modified than with the results in Eusebius. But that was a team effort, right? It wasn't him by himself. And so, it raises all sorts of interesting questions about "what is an author?" And "what is research?" And "how do we evaluate who contributed what and does it even matter?" If we label an individual as the primary researcher, or, if it's okay, just [label] a network of people doing things. So that got me hooked enough that I started hanging out with the Experimental Humanities Lab. And so now I'm learning Python, and I'm doing online classes learning Python and trying to get good enough that I can use it in my own work.

Dylan Doyle Burke  6:48
So for some of our listeners, they might not know what AAR is, and I'm wondering if you can paint a picture of kind of theology, and the field of theology, and whether there's already dialogue being had between theology and artificial intelligence, or whether this is kind of a new field that Iliff is more of at the cutting edge of.

Dr. Ted Vial  7:11

Yeah, okay, that's great. So, the AAR is the American Academy of Religion. It's a professional guild; it's the first organization for scholars of Religion, and it meets annually in a conference. It does a lot of things. It meets in conjunction with the Society of Biblical Literature, and it's about 10,000 scholars of religion, many of whom are faculty, [and] a lot of graduate students. There are some practitioners from different traditions who are not in academia, but it's sort of the major clearing house for organizing, research and teaching in scholarship on Religion. So, they have an interest in figuring out "if scholarship is changing, how do we get ahead of the curve and help our institutions and our individual scholars do that." So that was why that that sort of "Future of Publications" Task Force was formed. I went to several people at Iliff. Michael Hemingway primarily organized at HaT (?) camp. That's... Do you remember what that stands for?

Dylan Doyle Burke  8:24

Not off the top of my head... *Laughs*

Dr. Ted Vial  8:26

It's the "Humanities and Technology" or something like that. Anyway, it's a group of people interested in bringing technological tools to the study of humanities and they organize HaT camp, which is one of the so-called unconferences where people meet. So, it met the day before the AR, annual conference. It still does, and people meet and you don't bring prepared research, which is why it's an "Unconference." Everybody meets in the morning, and they sort of figure out what people are interested in, and they make groups on the spot, and then people share research and techniques and tools and stuff. So, I was like, "Okay, if I'm trying to figure this out, I should go to HaT camp. So, I went to that camp.... And I went one year, and it was just interesting. And so I went again the next year and there was a guy, Randy Reed, who teaches at Appalachian State, and he's organized one of the sections of this HaT camp, trying to see if we could start a new group at the American Academy of Religion that was dedicated to the [intersection of] religion and artificial intelligence. And I just sort of signed in when I showed up at the meeting, and then I got an email saying "thank you for volunteering to be on the steering committee." So as of a year ago, we had our first sessions last year, a research seminar on "religion, the study of religion, and artificial intelligence" in the American Academy of Religion. And the meetings -- we had, I think, two or three sessions -- they were packed, and there's a lot of people starting to do research here and a lot of people who are interested in the research.
Dr. Ted Vial  10:00

This covers both sort of techniques for doing research in the humanities using artificial intelligence, but artificial intelligence also raises huge religious questions that people are interested in studying. Both in the ways that artificial intelligence might change the practice of religion, but also all of the sort of classic questions of theological anthropology of "what it means to be human" that many religious traditions address get asked again in different ways. When you think about artificial intelligence about "what is intelligence?" "Does it have to be embodied?" "Why does it matter how it's embodied?" So, there's a lot of interesting ethical, but also broader than ethical, sort of cultural, theological, historical interest in what artificial intelligence... How it's going to change how humans are and how they relate to the world. And so, there's now a group that's sort of the clearing house for research on this in the study of religion.

Dylan Doyle Burke  11:04

Let's dive into some of those questions because I think maybe historically, people think about religion or maybe even religious studies in the humanities on one side, and then technology and STEM on the other side. And I'm wondering how you see these interconnecting? So, if you could say more about some of those questions that maybe you're asking your research, or that you see the field asking about artificial intelligence in the humanities.

Dr. Ted Vial  11:31

So that's great! So, there's a number of ways into that question. But I also just sort of grew up thinking like, "Hey, there were sort of STEM type people and sort of humanities type people." But let me get into it this way... So, after hanging out with the folks at Iliff in the Experiment of Humanities lab who were using Digital Research Tools. I worked with some people to write a grant to the Luce Foundation to start an AI Institute at Iliff. The thing that sold the grant to [the] Luce [Foundation] was that this is not just about ethics, because there's a lot of good people in many different kinds of organizations studying ethics and AI and that's very important work, but Luce was interested in in ways of doing public scholarship, and in particular theological scholarship in new and different ways. And the grant is focused on thinking through, in different formats, to questions of what it means to be human related to AI, which might include ethics but isn't confined to ethics.

Dr. Ted Vial  12:50

So, questions around: "What is a human?" "What is human flourishing?" "Does artificial..." I mean, when people design products using artificial intelligence that by and large have in mind a certain model of a consumer. It's a kind of an Adam Smith individualistic "I just have to have enough money to purchase this cool thing and will do certain things for me." But that's not necessarily the best model, I think, of what a human is. And so, the grant is intended to go both ways. It's supposed to be a place where people in academia can think about questions that arise in artificial intelligence about what it means to be human, but also in my dream world the relationship goes both ways. Right? So there are people working on AI in Silicon Valley and other places, and they say this themselves -- that "we don't
have enough of a background in philosophy or religious studies" -- to ask some of the questions that are coming up for us in helpful ways. Either because we're not trained to know that we don't have time for it, or everybody who works here was an engineering or a computer science major and didn't take enough of that. So, people are asking for sort of a conversation between humanities disciplines and AI, and I think about ways in which the resources of the humanities and the resources in religious studies could help people design better AI products. And by better, I mean both morally better, products [that] don't do damage but maybe even enhance human flourishing, but also better in the sense that they're better products that people would trust and would want to purchase or use somehow. And so, one of the early sorts of moments that clicked for me is that we had a board member of Iliff who got interested in the work we're doing and he's a CEO in Silicon Valley. And so, he thought this was great and he told a story about a robot at the Stanford Mall. And I've seen these robots too. They're becoming pretty common. But this robot, it looked like the thing from Lost in Space, if you're old enough to remember that TV show last time, it was big was like 300 pounds. And it would sort of go around the mall, and you could ask it questions, you could ask the directions, if security was needed to call security, if there was a weather event coming, it would alert people to the weather event. And the people who designed it, designed it to move away from little kids because they thought it'd be safer if it wasn't interacting with little kids a lot. But what they didn't realize is that if you're a kid, you love robots. And if you move towards a robot and it moves away, you think it's playing with you and you're going to chase it, and so there were these bunch of kids chasing this robot in the Stanford Mall. And finally, they sort of got it boxed into a corner, it fell over on one of the kids and sort of caused some minor injuries. So, there's a big lawsuit. So, going back to Justin's dissertation, like, on one set of interesting questions, there's a legal question of who's responsible, right? Which legally is not so interesting to me. But philosophically, which coder or which design engineer or which firm or which part of this thing is responsible for the behavior of the robot, or at some point does the robot become responsible for itself, right? That's one set of hugely interesting questions.

Dr. Ted Vial 13:20

But I also thought like, "Hey, you know, I studied 19th century German philosophy: and in the wake of Kant, there were all kinds of philosophers who determined that the fundamental thing about being human was this thing called the "Play Drive." That humans fundamentally are humans because we play. And I was like, you know, if any of these people had read some Schiller in their background, they would realize like, they should design the robot to play with people, or to discourage play, but then people are going to want to play with it, right? So there's all kinds of ways in which I think the richness of different traditions thinking about what it means to be human could be used to build into AI products, better ways of interacting with humans, and that the goal is creating an environment in which humans and machines can sort of interact in ways in which both can flourish. And that could be aided by some of the knowledge about different ways of thinking about different parts of what it means to be human.

Dylan Doyle Burke 16:45

So when I first started researching some of this, especially human computer interaction and human robotic interaction, I think I assumed that using the question of what it means to be human and talking
about Artificial Intelligence was just about that, you know, in however many hundreds of years when we can get to artificial general intelligence and kind of embodying humanity into robotics. But what I hear you saying is also there's a question here about the products that we have now. And that space of interaction, that kind of liminal space of that question of morality and what it means to be human and play. Even now, we can start talking about that. And these are kind of philosophical questions. And I'm wondering if you could talk more about what does Schleiermacher have to say about artificial intelligence right now? And what can we learn from Kant in these spaces? Because I think there are still some skeptics out there that, you know ... "We just need better code, right? We don't necessarily need to ask some of these bigger questions." What would you say to some of those skeptics?

Dr. Ted Vial  18:45

Yeah, so one of the things that that I think one of the places where Religious Studies can contribute not just to the world, but to the actual designing of artificial intelligent products is that if you talk to folks in Silicon Valley, they're profoundly aware of some of the issues and problems that arise with the development of artificial intelligence. And the go to move is to say, well, there's a technical solution to some of these questions, right? So for example, if you're concerned about privacy, or the sort of storage and use of data, there's all sorts of technical solutions for designing more secure and more transparent algorithms that are trustworthy in the sense that your data will be safe or safer with them and that you have more awareness of who's using your data and what they're using it for. Right? But there are all sorts of questions that are that don't have a technical solution. So, for example, there's a paper I love that came out of AI Now at NYU in New York, called Excavating AI, which is about the use of image net. So image net was for a long time, the largest labelled set of images that was publicly available so that when you're designing a product that's a recognition and image recognition product, you could train it on this data that was pre-labeled, so that so that you could have like thousands of pictures of a cat. And so, you can teach your model what a cat was, and then give it unlabeled data from the real world and it will be able to pick these things out. So, this is just a really sort of a brilliant article where they talk about how these categories were constructed. And they're constructed using the Mechanical Turk at Amazon, which are actually just very low-paid piece worker, like garment workers, in whatever time they have sort of quickly labeling data, labeling the images. And so particularly in the human category, the way that humans get labeled into subcategories is hugely problematic because it repeats all of the problems of stereotypes and discrimination that is just rampant in in our culture today. But of course, the folks designing image net didn't think through carefully enough. They need to read a little bit more cultural anthropology, a little bit more religious studies, or a little bit more critical race theory, a little bit more gender theory to think about the ways... Or they don't need to read it, they need to talk to somebody who's read it right to think about the ways that these categories got constructed. So that the machines are not being trained on data that's so biased they sort of amplify and recreate the bias in the products that people are now using, facial recognition software that people are now using in the world. It's not just whose face gets recognized by its own phone, but there are a lot of facial recognition products that are being used in law enforcement. So, if the categories at a sort of a deeply philosophical level are problematic, that has real life consequences for who gets stopped and who gets arrested who gets convicted by law enforcement.
So, there's been news, when we're recording this episode of the past week, where Apple and Google have now partnered to release this contact tracing app where people can opt-in. I don't know if you've seen this. But there's kind of unprecedented partnership to deal with the COVID-19 virus and things like that out in the socio-political world and the technical world and I'm wondering if we can kind of use that as an example, whether specifically or in general, about what theology or religious studies can give out in the world for that?

Yeah, that's a great... So, I didn't know about that particular partnership but I know that people are interested in contact tracing and that cell phones are a great way to do that. And if we had that kind of data, in the power of AI; if you think about all the permutations of trying to trace somebody who's tested positive, and then who that person has been in contact with, and who those people have been in contact with, I don't know, two or three or four degrees of separation. That the amount of data is massive, and the sort of social networking algorithm to figure out what the networks are is massive. And that's exactly the sweet spot for artificial intelligence, something [that's] almost impossible for humans to do with a calculator, or with a slide rule, or a map or something. Except it would take them years and years and years, which of course is too long, right? So, AI can do this very quickly. So that's great. And that's a social good, right? We don't want people dying from COVID-19. And the ability to track... The first question that arises is, "what happens to this data? And who has access to it and what are they using it for? And how do we know?" Right? So, I would love to know if I've come into contact with somebody who has been exposed to or is tested positive for COVID-19. I do not want Amazon or the government tracking all my data on my phone. I don't want it from Amazon because I don't want them micro-target me as a consumer in such pervasive ways that I'm sort of boxed into this.

The micro-targeting is so good and the micro-marketing is so good. They can actually... what they'll say is, "hey, we're just creating ads that are more useful to you. So, you can see what you want." But what they're actually doing is forming people to respond to the world in certain ways. They're creating certain desires, they're creating certain consumptive habits. So, they're actually developing a theological anthropology. And it's not one that I find one that makes my life the most richest and meaningful. So, I don't want them doing that. And I have some fears about a surveillance state and the uses that a government that doesn't have adequate checks and balances might make of personal data. This happens in other countries. I mean, you can see in Hong Kong when the when the democratic protests broke out after a couple weeks, what protests started doing is wearing masks and taking down all the surveillance towers with cameras because the government was very, very good at tracking who was where and targeting the people whom they thought were responsible. I mean, that could happen anywhere. I don't want it to happen here. So, I'm very nervous about who gets the data. So now the question is, "should we just not do it?" But if we're going to end the social distancing, and the quarantining in a way that is good for human flourishing, that lets us get back to activities that give
people jobs and let them go about their lives. So, it's not a yes or no question. The question is... I think we should do it. But we need to do it. We need to know the process of how it's done. So that we can trust the process. So that we know what are the controls on the data, who has access to the data, how are the algorithms working? Because algorithms just do what you tell them to, so there might be some mistakes.

Dr. Ted Vial  27:02

So, in the world of AI ethics people talk about explainability... Can we open up the black box and see how the algorithm is tracking people in the connections make between people? And is it going to be a transparent process? Or is it going to be a process that's hidden in some government agency? And we don't know if it goes away when COVID goes away. So those are questions that we need to have a public conversation about, and one of the places to host that public conversation. And this is kind of what the Academy is for, right? Many people do these sort of, I don't know, esoteric things, but they're all in the service of a kind of a public conversation at a meaningful, detailed, sophisticated level that helps us actually make real life decisions about the best way for us to live our lives. So, something like the Iliff Institute could be a place... This is a great idea Dylan. This could be a place where we have something to contribute to the public conversation around how we're going to do this in a in a good way and not in a dystopian way.

Dylan Doyle Burke  28:08

I'm also thinking of... So, when I think of religious studies, I do think of the human flourishing aspect. And then I also think about this, you know, this concept that you may have heard of, "God," right? *Laughs* And all of this. So where does where does God play into some of these questions because Iliff isn't just... Iliff is a seminary in particular, and the question of God plays into that. So how do we make sense of that concept in this entire conversation?

Dr. Ted Vial  28:37

Well, let me start here by saying that... *Laughs* One of my best friends from college is a is a super kind of fundamentalist Christian. So, we go on these hikes together, and I always ask him questions about his religion and he always says, "Ted, it's not a religion, it's a relationship." So the internal rhetoric is "I'm not religious, I just have this relationship with Jesus," but for me as a scholar of religious studies, it's clear to me that that's a discursive tradition in his tradition about ways to think about his relationship to God or to Jesus or to the divine right. And so, everybody's theology, everybody's religion, everybody's relationship to God is mediated through social and linguistic communities and patterns. And that is this is the bread and butter of religious studies, right? I mean, there's the theology wing of it that asks more directly about relationships to God, but the theologians and the folks who are not theologians are really great at looking at the ways in which "communities" are shaped forums, the power dynamics in those communities, the history of those communities, and how that shapes the way that your relationship to the divine is mediated for you. We have now folks that I love teaching courses on the digital Bible and
religion in a digital age in which they ask very explicitly this question of the ways in which the forms in which our religious practices and artifacts are mediated in a digital way changes our relationship to those things. So, one level of answer is, just to say, "you might think that you just have a plain vanilla unmediated relationship with God, but that itself is a discursive practice which mediates to you in a certain way." And so, it's interesting to think about the fact that you have a Bible on your phone, and you might have access to 20 different translations, and you might have access to a concordance, and you might have access to original languages and different manuscripts of [the] original languages. How is that different than the Bible I grew up with, which had gold edges and red letters? How does that mediate your relationship to parts of your tradition that you think are important? So that's one huge, interesting set of questions, I think.

Dylan Doyle Burke  31:31

It gets to the heart of this question of materiality as well in artificial intelligence where you have code, but then you also have robotics and you have your phones and your apps, and it's playing out in real time and real space. So, one of the questions I hear Religious Studies asking is: "What is our relationship to materiality and meaning, and how do we put those things in conversation?"

Dr. Ted Vial  31:52

Yeah, that's super interesting. So, this is one of the contributions that I think Religious Studies can make. When I got into this, I realized I was going to teach a course on AI and what it means to be human. I started reading as widely as I could in philosophies of AI, and there's a number of books, but maybe the most prominent right now is Max Tegmark's "Life. 3.0." The guy's brilliant. He's a physicist, he's at MIT. And he's done a lot of good work around ethics and AI. He's not specially trained in AI, but he knows a lot about it. But there's parts of the book that are just loopy and he'll say things like: "well, because of substrate independence, we'll be able to download our consciousness in different forms, and then we can live forever. And because of substrate independence, like the idea that you can write a code and you can run it on a Windows machine or you can run it on a Mac machine." The idea that human life is some sort of consciousness [that] is information and that information can be digitized into bits and then that bits can run on different hardware and has no effect on your experience of the world or how you're conscious in the world. To me [that] just seems crazy, honestly. But the thing is, Max Tegmark has spent so much time with physics and AI that he hasn't been all... I would say like 80% of the books and religious studies right now are on different forms of embodiment. So, I'm not saying that that religious studies has it right and Max Tegmark has it wrong, but that's a conversation we have to have around the ways that human intelligence is embodied. I think there are deeply profound ways that...

Dr. Ted Vial  33:35

So, I assigned in this class [what] is now an old book by George Lakoff and Mark Johnson. So Lakoff and Johnson wrote a book -- I don't like it -- I think in the 90s called "Philosophy in the Flesh," and that book is about the way that humans interact in the world, in part through concepts. You have certain concepts
in your mind that organize your experience for you in the way that you think about the world. And this Lakoff-Johnson book is about how the basic human concepts are developed, evolutionarily, by bodies moving through space and creating the concepts because of our spatial or spatial experience of the world. I know there's more research that's updated that but I think that basic insight is true. One thing that's irritating about that is because these people have often not read enough philosophy. So, this is a basically a content insight, which they're now pretending was invented by cognitive science unless they have some evidence that confirms some of Kant's ideas. So there's this great part in Kant where he's writing about the fact that humans orient themselves in space spatially by using their bodies and using the concepts of left and right, and his argument for why this is the way that your mind organizes the world. Look at your right hand and your left hand. There are probably not two objects in the world that are more identical, but you can't visualize them merging, right? Because if you if you either thumbs or opposite or if you flip one hand over so that some thumbs lined up with each other, then when the they don't that the hands are opposite so they're mirror images of each other right? So even though your hands are in effect the same, because your mind automatically organizes things into right and left you can't merge this image in your mind.

Dr. Ted Vial  35:42

So, there's a sense in which humans do... We're not, as Sara (?) at DU likes to say, we're not minds on a stick. That the stick, the body... We're embodied intelligences and the body affects the way that we operate conceptually in the world. So, it's not clear what it would mean to take those concepts and download that into a silicon form. I know you could download parts of it, but would that be the same human experience at this point? I'm sure it's not, and I'm not sure whatever would be in the future. I know that at the robotics lab at MIT, this also was old research, the breakthrough moment for trying to design a robot that could sort of move intelligently was to realize that they should not be using a central processing unit a CPU that made all the decisions, but [instead] to distribute smaller processing units in each of the joints of the robot. Because like a human nervous system, your arm can figure out how to do certain things and transmit that information to your brain better than if your brain tries to make all the decisions for all the parts of your body. So even in robotics, you have this sense that intelligence works better if it's embodied in certain forms. These are super interesting philosophical questions to me and there are questions, I think, that where the philosophy of thinking this through can help people designing robots better.

Dylan Doyle Burke  37:16

And they're fascinating... I guess further research questions about how neuroscience plays into that. Like when you think about memory and how that's just not necessarily in one place in the brain. But some folks argue that it's throughout the body, or throughout the mind throughout the brain. But as we move towards closing, one of the reasons why this conversation is so exciting for me, is because this is basically my dissertation topic, which is how does Religious Studies play into artificial intelligence and vice versa? And I'm wondering, as we close if you had a particular piece of advice for someone like me, who is currently a student in this work, what would that piece of advice be?
Well it's a great topic, Dylan, and my advice would be to narrow it down into something writable! You can write many books over the course of your life, but you just have to write one for your dissertation. So I do think that your instincts are on the money that there are great resources in the history of theology and in the study of religion that are useful, both to people designing a products but in thinking through a world in which humans and machines are going to coexist together in certain ways. And I would, over the next year, try to get a sense of which part of this question you have most passion for right now. And then go deep. You know if it's intelligence... I just assigned in my Intro to Theology class, students are reading an essay around what is artificial intelligence. I don't love the word artificial intelligence because it's real intelligence, it's just different than human intelligence. And then they read a brief excerpt from Thomas Aquinas, Summa Theologia, in which he's talking about what intelligence is and how it's different and how there are different kinds of intelligence that are ordered properly in a well-ordered human. Just to sort of juxtapose, I don't know, some of the thin ways that people designing AI think about intelligence as sort of a calculative intelligence and there's a lot of richness in thinking about intelligence or thinking about consciousness or thinking about ethics or thinking about... My God, the idea that we should train cars to drive themselves using trolley problems is a horrible idea, right? So just in any one of these areas, there's so much richness in the Western philosophical tradition, Western religious traditions, other religious traditions, other cultural traditions. That it really is exciting to think about how to go deep in those traditions and then see how they can dovetail with some of the work being done in AI right now.